

# 2023 PRODUCT CATALOG

# Northern



The Security Professional's Choice For Video Surveillance Products

## N3 IP



4

8

16

32



## N3 HD-Analog



4

8

16



## N2 Series IP-POE

Our All-New Northern<sup>★</sup> N3 Series NVR's with POE & N2 "SD" Series 4MP True WDR IP Cameras.



### N3NVRPOE Series



Pages 4~7

N3 Series 4, 8, 16 & 32 Channel Network Video Recorders with POE

### N2IP4AFBSD



Page 11

N2 "SD" Series 4MP IP, True WDR Outdoor Varifocal IR Bullet Camera

### N2IP4TSD



Page 14

N2 "SD" Series 4MP IP, True WDR Outdoor IR Turret Camera

### N2IP4WSD



Page 15

N2 "SD" Series 4MP IP, True WDR, Outdoor IR Wedge Camera

## N2 Series HD Analog

Our All-New Northern<sup>★</sup> N3 Full Hybrid DVR's & 4-in-1 HD Analog Cameras.

### N3HVR Series



Pages 18~21

N3 Series 4, 8 & 16 Channel 5-in-1 Hybrid HD Analog Recorders

### HDTIR90WD



Page 28

4-in-1 1080p, True WDR Outdoor Turret Camera

### HDAFDIR90WD



Page 27

4-in-1 1080p, True WDR Outdoor Varifocal IR Dome Camera

### HDBIR60WD



Page 29

4-in-1 1080p, True WDR Outdoor IR Bullet Camera

## Monitors, Power Supplies & Accessories

Northern<sup>★</sup> Monitors, Power Supplies, Batteries & Other Accessories.

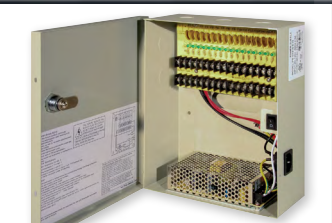
### LED Series Monitors



Pages 46~49

18" ~ 32" Security Rated Widescreen LED Monitors

### Power Supplies



Pages 50~53

12 Volt DC & 24 Volt AC Power Supplies & Accessories

### Mounting Accessories



Pages 38~41

N2 Camera Wall Mount, Junction Boxes & Pendant Caps

### Batteries & Sirens



Pages 54~55

12VDC SLA Batteries, Single & Dual Tone Sirens

## Northern<sup>★</sup> THE SECURITY PROFESSIONAL'S CHOICE



Northern<sup>★</sup> is the security professional's choice for video surveillance products. Whether you require recording devices, cameras, monitors or the accessories to put a system together, Northern<sup>★</sup> can offer you state-of-the-art products with the latest technology.

Our team of dedicated experts is in tune with the latest advances in surveillance technology and is committed to providing cutting edge products to security dealers throughout North America. The Northern<sup>★</sup> line provides installing dealers with the products needed to do the job properly, efficiently and profitably while satisfying the needs of their customers.

## Northern<sup>★</sup> TABLE OF CONTENTS



N3NVRPOE Series NVR's.....	4~7
N3NVR Kits .....	8
N2 "SD" Series IP Cameras .....	9~17
N3HVR Series 5-in-1 Hybrid Recorder... ..	18~21
N3HVR Kits .....	22
N2HD Series ~ HDPTZ33X Cameras.. ..	23~37
N2 Camera Mounts.....	38~41

Security Monitors .....	46~49
Power Supplies & Accessories.....	50~53
12 Volt DC Batteries .....	54
Single & Dual Tone Sirens .....	55
Quick Reference Guides.....	56~62
Index .....	63

# N3NVRPOE Series NVR's



## N3NVR4POE

4-Ch NVR with 4-Channel POE

## N3NVR8POE

8-Ch NVR with 8-Channel POE

## N3NVR16POE

16-Ch NVR with 16-Channel POE

## N3NVR3216POE

32-Ch NVR with 16-Channel POE



**Plug and Play!**  
Plug & Play with Northern N2 & N3 Series Cameras!  
Cameras Sold Separately

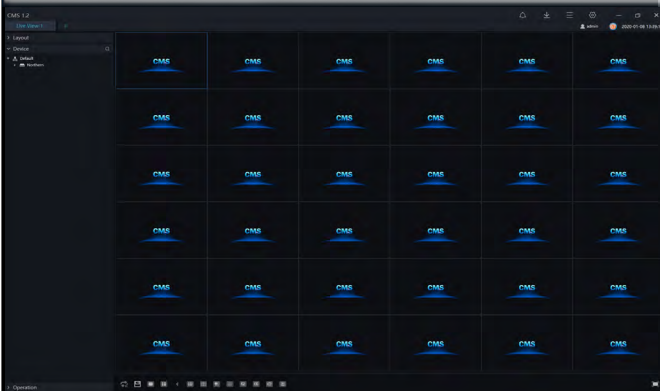
**NORTHERN VIEW**  
Free Mobile App for iPhone,  
iPad, Android™ & Android™ Tablets

### FEATURES:

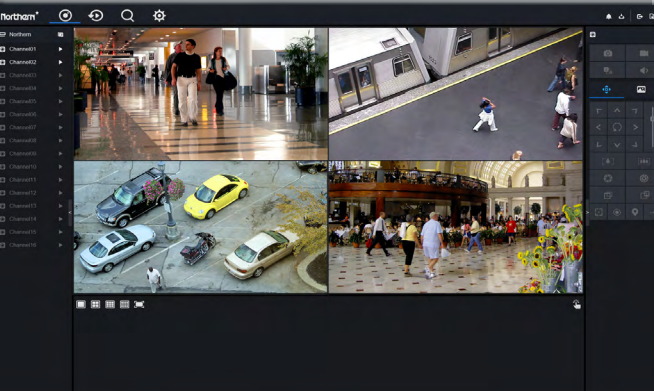
- ◆ Real-Time 30FPS/Ch Recording
- ◆ Up to 8MP Recording 4-8-16 Channel
- ◆ Up to 12MP Recording on 32 Channel
- ◆ H.265 & H.264 Recording Compressions
- ◆ NorthernView Mobile App for iPhone, iPad & Android™
- ◆ Built-in Motion Detection & Privacy Mask
- ◆ Free CMS Software
- ◆ Supports P2P Operation
- ◆ Up to 12TB Storage Capacity (4Ch)
- ◆ Up to 24TB Storage Capacity (8, 16Ch)
- ◆ Up to 48TB Storage Capacity (32Ch)
- ◆ Integrated 40W/120W/120W POE Switch (4/8/16-Ch)
- ◆ Integrated 160W POE Switch (32Ch)
- ◆ Included Mouse for NVR Control
- ◆ USB for Mouse Control & Copying Video
- ◆ Simultaneous HDMI & VGA Outputs (4Ch)
- ◆ Independent HDMI & VGA Outputs (8, 16, 32Ch)
- ◆ Up to 16 Channel Synchronous Playback
- ◆ Accepts ONVIF Protocols
- ◆ Rack Mount Hardware Included (8, 16, 32Ch)
- ◆ Built-In Audio & Alarm
- ◆ Supports 2-Way Audio

*Android is a trademark of Google LLC.*

### CMS Software For PC/Mac



### Browser Based Remote Software



# N3NVRPOE Series NVR's

### Learn More

#### H.265 Recording Compression

H.265 compression format provides both increased video quality and reduced bandwidth consumption.

#### Mobile App for iPhone, iPad & Android™

NorthernView Mobile App allows for viewing and playback from multiple mobile devices.

#### Real Time 1080p Recording

All Models record up to 30FPS per Channel.

#### Up to 48TB Storage Capacity

Large storage capacities allows for longer storage of recording video. Up to 12TB (4Ch), 24TB (8-16Ch) 48TB (32Ch).

#### Built in Motion Detection

Maximize your recording duration by only recording when Motion is detected by the NVR.

#### Built in POE Switch

4Ch/40W, 8 & 16Ch/120W & 32Ch/160W POE Switch for connecting and powering cameras directly from the NVR using only a single Category 5/6 cable.

#### Free CMS Software for PC & MAC

Connect to Multiple NVR's or individual IP cameras from a single computer with the included CMS software.

#### HDMI & VGA Video Outputs

Simultaneous HDMI & VGA outputs on 4Ch model. Independent HDMI & VGA outputs on 8-16-32Ch Models.

#### Supports DDNS

DDNS feature insures you will always stay connected to your NVR when using a Dynamic IP address.

#### P2P Operation

Peer to Peer functionality makes mobile viewing setup easier by bypassing the need to configure port forwarding in most routers.

#### Multiple USB Ports

NVR's include dual front USB & single rear USB 2.0 ports for easy copying of video to a USB drive and mouse control.

#### Remote Accessibility

Remotely connect, monitor, playback, record and change NVR settings via IE & Chrome browsers.

#### Plug & Play

The N3NVR Series will plug and play with all N2 Series IP Cameras. Plug & Play automatically finds and configures Northern N2 Series cameras.

### Recorder Model Numbers

4Ch & 8Ch Models Offered as Base Models with No Storage or with 2TB Built-in Drives, 16Ch Models Offered as Base Models with No Storage or with 2TB & 4TB Built-In Drives. Other Drive Configurations Require Separate Base Model Recorder & Hard Drive/s. See chart below.

### Package Contents

Power Cord	Rack Mount Hardware (8, 16, 32Ch only)
Power Supply (4 & 8Ch Units only)	Mouse
Quick Start Manual	

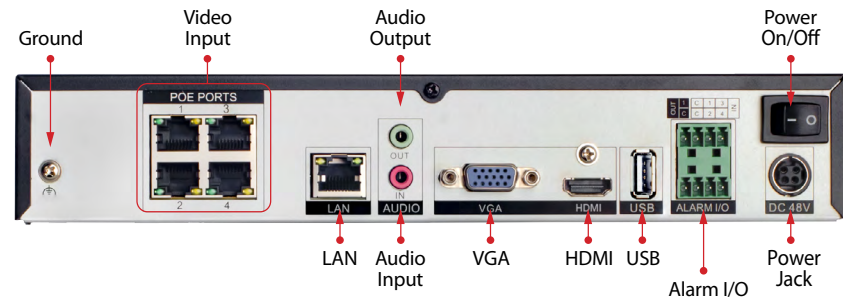
Note: Specification subject to change without notice

Recorder	4 Channel	8 Channel	16 Channel	16 Channel
No Storage	N3NVR4POE	N3NVR8POE	N3NVR16POE	N3NVR3216POE
2TB	N3NVR4POE2T (Built-In Drive)	N3NVR8POE2T (Built-In Drive)	N3NVR16POE2T (Built-In Drive)	N3NVR3216POE + NORTHERN-WD22PURZ
4TB	N3NVR4POE + NORTHERN-WD42PURZ	N3NVR8POE + NORTHERN-WD42PURZ	N3NVR16POE4T (Built-In Drive)	N3NVR3216POE + NORTHERN-WD42PURZ
6TB	N3NVR4POE + NORTHERN-WD63PURZ	N3NVR8POE + NORTHERN-WD63PURZ	N3NVR16POE + NORTHERN-WD63PURZ	N3NVR3216POE + NORTHERN-WD63PURZ
8TB	N3NVR4POE + NORTHERN-WD8001PURP	N3NVR8POE + NORTHERN-WD8001PURP	N3NVR16POE + NORTHERN-WD8001PURP	N3NVR3216POE + NORTHERN-WD8001PURP
10TB	N3NVR4POE + NORTHERN-WD101PURP	N3NVR8POE + NORTHERN-WD101PURP	N3NVR16POE + NORTHERN-WD101PURP	N3NVR3216POE + NORTHERN-WD101PURP
12TB	N3NVR4POE + NORTHERN-WD121PURP	N3NVR8POE + NORTHERN-WD121PURP	N3NVR16POE + NORTHERN-WD121PURP	N3NVR3216POE + NORTHERN-WD121PURP
16TB	N/A	N3NVR8POE + (2)NORTHERN-WD8001PURP	N3NVR16POE + (2)NORTHERN-WD8001PURP	N3NVR3216POE + (2)NORTHERN-WD8001PURP
20TB	N/A	N3NVR8POE + (2)NORTHERN-WD101PURP	N3NVR16POE + (2)NORTHERN-WD101PURP	N3NVR3216POE + (2)NORTHERN-WD101PURP
24TB	N/A	N3NVR8POE + (2)NORTHERN-WD121PURP	N3NVR16POE + (2)NORTHERN-WD121PURP	N3NVR3216POE + (2)NORTHERN-WD121PURP
36TB	N/A	N/A	N/A	N3NVR3216POE + (3)NORTHERN-WD121PURP
48TB	N/A	N/A	N/A	N3NVR3216POE + (4)NORTHERN-WD121PURP

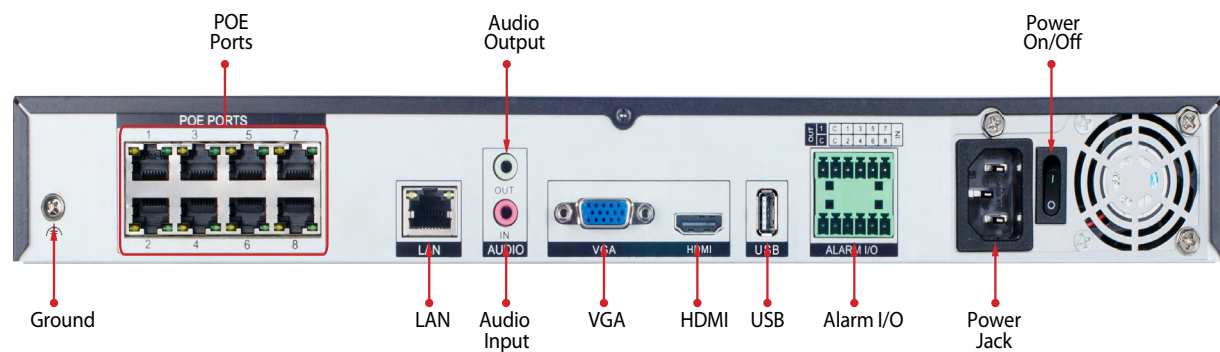


## Rear Panel Connections

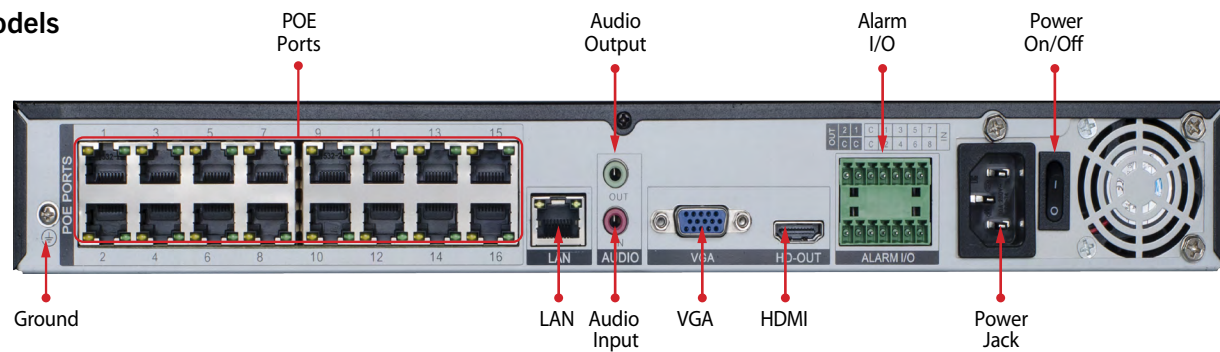
### 4 Ch. Models



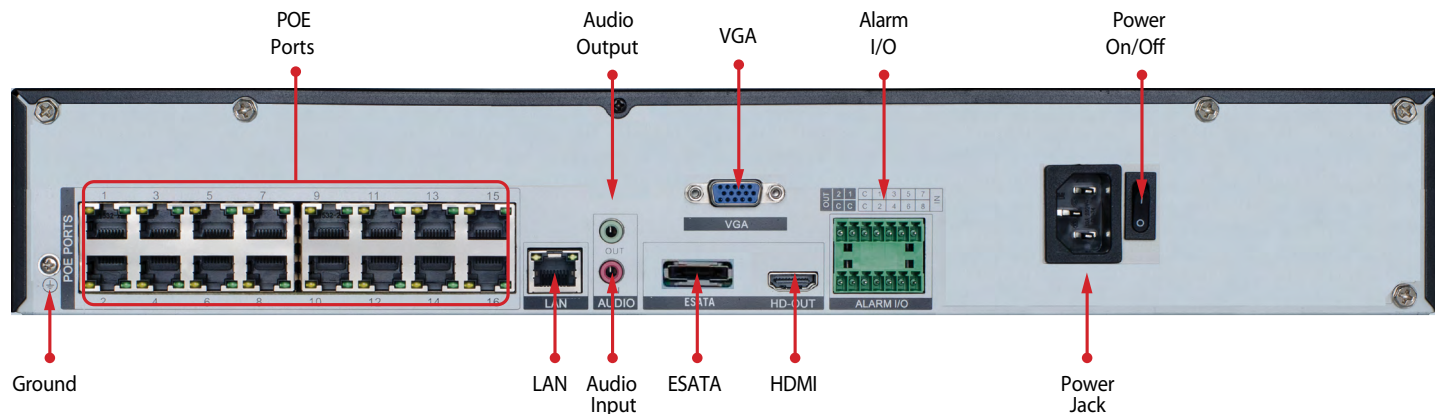
### 8 Ch. Models



### 16 Ch. Models



### 32 Ch. Models



## N3NVRPOE Series Specifications

FEATURES	N3NVR4POE	N3NVR8POE	N3NVR16POE	N3NVR3216POE
Video/Audio Input	IP Video Input	4-Channel	8-Channel	16-Channel
	Two-Way Audio Input	3.5mm Audio Jack		
	NTSC / PAL	Yes		
	Plug & Play Models	"N2 Series Only" N2IP4B, N2IP4D, N2IP4D4MM, N2IP4T, N2IP4W, N2IP4AFD, N2IP4AFB, N2IPPTZ30X		
Network	Incoming Bandwidth	40 Mbps	80 Mbps	160 Mbps
	Outgoing Bandwidth	40 Mbps	80 Mbps	160 Mbps
	Remote Connection	Up to 8 Users		
Video/Audio Output	Recording Resolution	12MP (32ch Only) / 8MP / 6MP / 5MP / 4MP / 3MP / 1080p / 720p / D-1		
	Frame Rate	12MP @ 20fps (32ch Only), 8MP / 6MP / 5MP / 4MP / 3MP / 1080p / 720p / D-1 @ 30fps		
	HDMI Output Resolution	3840 x 2160, 1920 x 1080, 1280 x 1024, 1024 x 768		
	VGA Output Resolution	1920 x 1080, 1280 x 1024, 1024 x 768		
	Audio Output	3.5mm Audio Jack - For Two-Way Audio Only		
Decoding	Live / Playback Resolution	12MP (32ch Only) / 8MP / 6MP / 5MP / 4MP / 3MP / 1080p / 720p / D-1		
	Playback Capability	1Ch-8MP / 4Ch-1080P@30fps	1Ch-8MP / 4Ch-1080P / 8Ch-D1@30fps	1Ch-8MP / 4Ch-1080P / 9Ch-D1 / 16ch D1@30fps
Recording & Playback	Compression	H.265, H.265+, H.264, H.264+		
	Record Mode Types	Manual, Schedule (Regular, Continuous), Motion Detection, Alarm In		
	Bit Rate (Per Channel)	100Kbps ~ 6144kbps		100Kbps ~ 8000Kbps
	Pre & Post Recording	Auto Pre Recording based on # of Cameras Connected / Post Record (30 sec ~ 60 sec adjustable)		
	Redundant Recording	N/A		Requires 4x HDD
	Recording Parameters	Independent for Each Channel (Resolution, Frame Rate, Bit Rate, etc.)		
	Zooming	Yes - Digital Zoom Available in Live View & Playback		
	Synchronous Playback	Up to 4Ch	Up to 8Ch	Up to 16Ch
	Playback Controls	Play, Pause, Stop, Rewind, Fast Play, Slow, FW 30s, BW 30s		
	Searching	Time / Date, Alarm, Picture Grid, Event		
Hard Disk	SATA	1x	2x	4x
	Capacity	Up to 12TB		
	Max Storage	12TB	24TB	48TB
	RAID	N/A		RAID 5,6,10
	eSATA	N/A		Yes
External Interface	HDD Detection	Built-IN SMART Detection		
	Network Interface	1 RJ-45 port (10/100Mbps)	1 RJ-45 port (10/100/1000Mbps)	
	USB Interface	3x USB 2.0		
	Alarm In/Out	4/1	8/1	8/2
	CMS Software	Included NorthernView N2 Series CMS		
PoE	Network Interface	4Ch 100Mbps	8Ch 100Mbps	16Ch 100Mbps
	Maximum Power	40W	120W	160W
	Supported Standard	IEEE 802.3af		
General	Power Supply	DC48V/1.25A	AC100~240	
	Consumption (no HDD)	< 5W		
	Operating Temperature	-10 °C ~ 50 °C (14 °F ~ 122 °F)		
	Operating Humidity	Less than 90% RH		
	Chassis	No Rack Mount	1U Rack Mount	2U Rack Mount
	Dimensions	255x235x47.5mm	372x310.5x46.5mm	440x383.6x70mm
	Weight (no HDD)	1.98lb / 0.9kg	4.6lb / 2.1kg	6.05lb / 2.75kg

Note: Specification subject to change without notice

# N3NVR 4 & 8 Channel Kits



## N3NVR4KIT4C 4 Channel IP KIT



### KIT INCLUDES:

4-Channel N3NVR w/ 2TB Storage  
4 x 1080p 2.8mm Eyeball Cameras w/ 100' IR

## N3NVR8KIT6C 8 Channel IP KIT



### KIT INCLUDES:

8-Channel N3NVR w/ 2TB Storage  
\*6x 4MP IP, 2.8mm Eyeball Cameras with 100' IR

\* Customize Your Kit with 2 Additional **Northern\*** N2 Series IP Cameras (see pages 8~16, sold separately)

### CAMERA FEATURES (N2IPKITCAMSD):

- ◆ Up to 25FPS, 4MP Max Resolution
- ◆ H.265 Recording Compression
- ◆ Digital Wide Dynamic Range
- ◆ Fixed Focal 2.8mm IR Lens
- ◆ 2 High Power IR LED's – 100' IR Range
- ◆ SD Card Slot - Supports 256Gb
- ◆ Mechanical IR Cut Filter
- ◆ Dual Stream Capability
- ◆ 3D Digital Noise Reduction
- ◆ POE- Power over Ethernet
- ◆ IP66 Weatherproof

Full Specifications on Page 9



GUARDING VISION

### GUARDING VISION

Free Mobile App for iPhone,  
iPad, Android & Android Tablets

### NVR FEATURES (N3NVR4/N3NVR8):

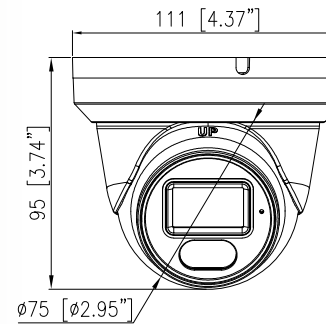
- ◆ Real Time 30FPS Recording @ 1080p
- ◆ 2 Terabyte Included Storage
- ◆ Up to 8MP Recording
- ◆ H.265 Recording Compression
- ◆ NorthernView Mobile App for iPhone, iPad & Android™
- ◆ Supports P2P Operation
- ◆ Integrated 40W/80W POE Switch (4Ch/8Ch)
- ◆ Included Mouse for NVR Control
- ◆ Dual USB for Mouse Control & Copying Video
- ◆ Simultaneous HDMI & VGA Outputs
- ◆ Up to 4 or 8 Channel Synchronous Playback
- ◆ Built-In Audio & Alarm
- ◆ Supports 2-Way Audio
- ◆ Rack Mount Hardware Included (8Ch)

Full Specifications on Pages 4-7



# N2IPKITCAMSD

## N2 "SD" Series 4MP IP, Outdoor IR Eyeball Camera POE, 2.8mm IR Lens, 100' IR, IP66



Front View & Dimensions



### FEATURES:

- ◆ H.265 & H.264 Compression
- ◆ Digital Wide Dynamic Range
- ◆ Up to 2560 x 1440 Resolution
- ◆ Fixed Focal 2.8mm IR Lens
- ◆ 2 High Power IR LED's - 100' IR Range
- ◆ SD Card Slot - Supports 256Gb
- ◆ Mechanical IR Cut Filter
- ◆ Dual Stream Capability
- ◆ 3D Digital Noise Reduction
- ◆ POE - Power over Ethernet
- ◆ Free CMS Software
- ◆ ONVIF Profile S Compliant
- ◆ IP66 Weatherproof

### INCLUDED ACCESSORIES:

Quick Guide, Mounting Template,  
Hardware Packet, Adjustment Wrench,  
Waterproof Connector.

### OPTIONAL MOUNTING ACCESSORIES:

**N2JB3** - Junction Box



**N2PC2** - Pendant Cap



**N2CPM1** - Pendant Mount  
(Requires N2PC2)



**N2HWM1** - Wall Mount  
(Requires N2PC2)



**N2POLEMT2** - Pole Mount  
(Requires N2PC2 & N2HWM1)



	FEATURES	N2IPKITCAMSD
Camera	Image Sensor	1/3" Progressive Scan CMOS
	Minimum Illumination	Color: 0.1Lux @(F1.2,AGC ON) , B/W: 0Lux @(IR LED ON)
	S/N Ratio	55dB
	IR LED Count / Range / Nanometer	2 IR LED's / 100' Range / 850nm
	Shutter Time	1/5s - 1/20,000s
	Lens (IR Corrective)	Fixed 2.8mm - Angle of View 105° -
	Camera Bracket Adjustment	Pan: 0°~360°, Tilt: 0°~90°, Rotation: 0°~360°
	Day & Night	Yes - True Day/Night with IR Filter - Auto Switch
	DNR (Digital Noise Reduction)	2DNR & 3DNR, Auto / Manual (0-100 Adjustable)
	DWDR (Digital Wide Dynamic Range)	On / Off (0-100 Adjustable)
	BLC (Backlight Compensation)	On / Off (0-100 Adjustable)
	Smart Analytic Features	Virtual Fence, Advanced Perimeter Detection
	Video Compression	H.265, H.264, MJPEG (for both stream types)
Resolution Bitrate	Max. Resolution	2560 x 1440 (4MP)
	Mainstream Resolution	Main Stream: 2560x1440, 2304x1520, 1920x1080, 1280x720 @ 25fps
	Substream Resolution	704x576, 640x360, 480x360, 352x288 @ 25FPS
	Video Bitrate	Main: 128kbps ~ 6144kbps / Sub: 16kbps ~ 1536kbps
Network	Protocols	IPv4, RTSP/RTP/RTCP, TCP/UDP, HTTPS, DHCP, DNS, DDNS, UPNP, ICMP, IGMP, NTP, SMTP, 802.1x, SNMP
	General Function	Supports Mirror, Smart IR, Password Protection, Privacy Mask, Motion Detection
	Users	Up to 4 Users
	Client Software	NorthernView CMS, NorthernView Mobile App, NorthernView Tools
	Web Browser	IE11, Chrome, Firefox
Interface	Communication Interface	1 Ethernet (10/100 Base-T) RJ-45 Connector
	Reset Button	Yes
	Onboard Storage	Yes Built in Micro SD/SDHC/SDXC slot, up to 256GB
General	Power Supply	12VDC / POE (IEEE 802.3af)
	Power Consumption & Current	2W (IR LED OFF), 5W Max (IR LED ON)
	Operating Conditions	Operating Temperature -30°C ~ 50°C (-22°F ~ 122°F)
	Weatherproof Rating	IP66
	Housing Material / Color	Aluminum / White
	Overall Camera Dimensions	ø4.4" x 3.7" (ø111 x 95mm)
	Weight	0.77lb / 350g
	Certifications	CE / FCC

Note: Specification subject to change without notice

## N2 "SD" Series 4MP IP, True WDR, Outdoor IR Bullet Camera POE, 2.8mm IR Lens, 100' IR, IP67, SD Card Slot

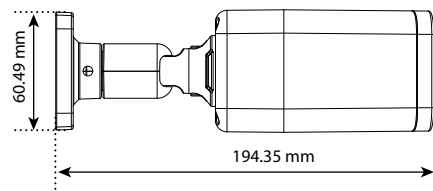
### FEATURES:

- ◆ H.265 & H.264 Compression
- ◆ True Wide Dynamic Range - 120dB
- ◆ Up to 2592 x 1520 Resolution
- ◆ Fixed Focal 2.8mm IR Lens
- ◆ 4 IR LED's - 100' IR Range
- ◆ SD Card Slot - Supports 256Gb
- ◆ Mechanical IR Cut Filter
- ◆ Triple Stream Capability
- ◆ 3D Digital Noise Reduction
- ◆ POE - Power over Ethernet
- ◆ Free CMS Software
- ◆ ONVIF Profile S/G/Q Compliant
- ◆ IP67 Weatherproof

### INCLUDED ACCESSORIES:

Quick Guide, Mounting Template, Hardware Packet, Adjustment Wrench, Waterproof Connector

### CAMERA OVERVIEW:



Side View & Dimensions

### OPTIONAL MOUNTING ACCESSORIES:

N2JB1 - Junction Box

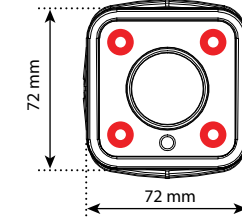


N2POLEMT2 - Pole Mount



FEATURES	N2IP4BSD	
<b>Camera</b>	<b>Image Sensor</b>	1/2.8" Progressive Scan CMOS
	<b>Minimum Illumination</b>	Color: 0.01Lux@(F1.2,AGC ON) , B/W: 0Lux @(IR LED ON)
	<b>S/N Ratio</b>	55dB
	<b>IR LED Count / Range / Nanometer</b>	4 High Power IR LED's / 100' Range / 850nm
	<b>Shutter Time</b>	1/5s - 1/20,000s
	<b>Lens (IR Corrective)</b>	Fixed 2.8mm - Angle of View 105°
	<b>Camera Bracket Adjustment</b>	Pan: 0°~360°, Tilt: 0°~90°, Rotation: 0°~360°
	<b>Day &amp; Night</b>	Yes - True Day/Night with IR Filter - Auto Switch
	<b>DNR (Digital Noise Reduction)</b>	2DNR & 3DNR, Auto / Manual (0-100 Adjustable)
	<b>True Wide Dynamic Range (120dB)</b>	On / Off (0-100 Adjustable)
	<b>BLC (Backlight Compensation)</b>	On / Off (0-100 Adjustable)
	<b>Smart Analytic Features</b>	Perimeter, Single Virtual Fence, Double Virtual Fence
	<b>Region of Interest</b>	Yes
	<b>Video Compression</b>	H.265, H.264, MJPEG (for all stream types)
<b>Resolution/Bitrate</b>	<b>Max. Resolution</b>	2592 x 1520 (4MP)
	<b>Mainstream Resolution</b>	2592x1520, 2560x1440, 2304x1296, 1920x1080, 1280x720 @25/30FPS
	<b>Substream Resolution</b>	D1, VGA, 640x360, CIF, QVGA @25/30fps
	<b>Third Stream Resolution</b>	VGA, CIF, QVGA @25/30FPS
	<b>Video Bitrate</b>	Main: 500kbps ~ 12000kbps Sub: 100kbps ~ 6000kbps Third: 100kbps ~ 3000kbps
<b>Network</b>	<b>Protocols</b>	IPv4/IPv6, 802.1x, HTTP, HTTPS, TCP/IP, UDP/IP, RTSP, DHCP, NTP, RTPC/RTP, PPPoE, SMTP, DNS, UPnP, FTP, ARP, SNMP
	<b>General Function</b>	Supports Mirror, Aisle Mode, Smart IR, Password Protection, Privacy Mask, Motion Detection
	<b>Users</b>	Up to 10 Users
	<b>Client Software</b>	NorthernView CMS, NorthernView Mobile App, NorthernView Tools
<b>Interface</b>	<b>Web Browser</b>	IE11, Chrome, Firefox
	<b>Communication Interface</b>	1 Ethernet (10/100 Base-T) RJ-45 Connector
	<b>Audio</b>	1Ch Input/Output (3.5mm)
	<b>Alarm</b>	1Ch Input/Output (Screw Terminal Connector)
	<b>Reset Button</b>	Yes
<b>General</b>	<b>Onboard Storage</b>	Yes Built in Micro SD/SDHC/SDXC slot, up to 256GB
	<b>Operating Conditions</b>	-30°C ~ 50°C (-22°F ~ 122°F) , Less than 90% RH
	<b>Power Supply</b>	12VDC / POE (IEEE 802.3af)
	<b>Power Consumption &amp; Current</b>	3.5W (IR LED OFF), 8W Max (IR LED ON)
	<b>Weatherproof Rating</b>	IP67
	<b>Housing Material / Color</b>	Aluminum / White
	<b>Overall Camera Dimensions</b>	7.7" x 2.5" x 2.5" (194.4 x 63 x 63mm)
	<b>Weight</b>	1.1lb / 500g
	<b>Certifications</b>	CE / FCC

## N2 "SD" Series 4MP IP, True WDR, Outdoor Varifocal IR Bullet Camera POE, Autofocus 2.7~13.5mm IR Lens, 120' IR, IP67, SD Card Slot



Front View & Dimensions



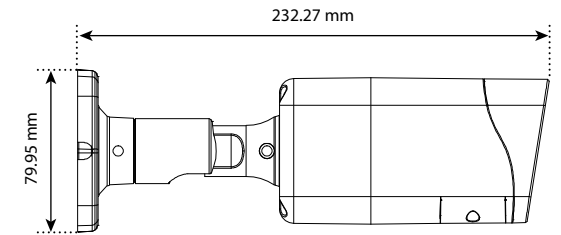
### FEATURES:

- ◆ H.265 & H.264 Compression
- ◆ True Wide Dynamic Range - 120dB
- ◆ Up to 2592 x 1520 Resolution
- ◆ Autofocus 2.7~13.5mm IR Lens
- ◆ 4 IR LED's - 120' IR Range
- ◆ SD Card Slot - Supports 256Gb
- ◆ Mechanical IR Cut Filter
- ◆ Triple Stream Capability
- ◆ Audio Line In/Out & Alarm
- ◆ 3D Digital Noise Reduction
- ◆ POE - Power over Ethernet
- ◆ Free CMS Software
- ◆ ONVIF Profile S/G/Q Compliant
- ◆ IP67 Weatherproof

### INCLUDED ACCESSORIES:

Camera, User Manual, Mounting Screws.

### CAMERA OVERVIEW:



Side View & Dimensions

### OPTIONAL MOUNTING ACCESSORIES:

N2JB1 - Junction Box



N2POLEMT2 - Pole Mount



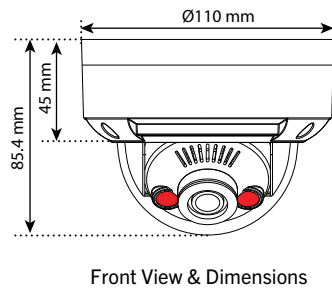
FEATURES	N2IP4AFBSD	
<b>Camera</b>	<b>Image Sensor</b>	1/2.8" Progressive Scan CMOS
	<b>Minimum Illumination</b>	Color: 0.05Lux@(F1.2,AGC ON) , B/W: 0Lux @(IR LED ON)
	<b>S/N Ratio</b>	55dB
	<b>IR LED Count / Range / Nanometer</b>	4 High Power IR LED's / 120' Range / 850nm
	<b>Shutter Time</b>	1/5s - 1/20,000s
	<b>Lens Type / Viewing Angle</b>	Autofocus 2.7-13.5mm with Remote Zoom / H: 34.3° - 103°
	<b>Camera Bracket Adjustment</b>	Pan: 0°~360°, Tilt: 0°~90°, Rotation: 0°~360°
	<b>Day &amp; Night</b>	Yes - True Day/Night with IR Filter - Auto Switch
	<b>DNR (Digital Noise Reduction)</b>	2DNR & 3DNR, Auto / Manual (0-100 Adjustable)
	<b>True Wide Dynamic Range (120dB)</b>	On / Off (0-100 Adjustable)
	<b>BLC (Backlight Compensation)</b>	On / Off (0-100 Adjustable)
	<b>Smart Analytic Features</b>	Perimeter, Single Virtual Fence, Double Virtual Fence
	<b>Region of Interest</b>	Yes
	<b>Audio Compression</b>	G.711, RAW_PCM
<b>Resolution/Bitrate</b>	<b>Max. Resolution</b>	2592 x 1520 (4MP)
	<b>Mainstream Resolution</b>	2592x1520, 2560x1440, 2304x1296, 1920x1080, 1280x720 @25/30FPS
	<b>Substream Resolution</b>	D1, VGA, 640x360, CIF, QVGA @25/30fps
	<b>Third Stream Resolution</b>	VGA, CIF, QVGA @25/30FPS
	<b>Video Bitrate</b>	Main: 500kbps ~ 12000kbps Sub: 100kbps ~ 6000kbps Third: 100kbps ~ 3000kbps
<b>Network</b>	<b>Protocols</b>	IPv4/IPv6, 802.1x, HTTP, HTTPS, TCP/IP, UDP/IP, RTSP, DHCP, NTP, RTPC/RTP, PPPoE, SMTP, DNS, UPnP, FTP, ARP, SNMP
	<b>General Function</b>	Supports Mirror, Aisle Mode, Smart IR, Password Protection, Privacy Mask, Motion Detection
	<b>Users</b>	Up to 10 Users
	<b>Client Software</b>	NorthernView CMS, NorthernView Mobile App, NorthernView Tools
<b>Interface</b>	<b>Web Browser</b>	IE11, Chrome, Firefox
	<b>Communication Interface</b>	1 Ethernet (10/100 Base-T) RJ-45 Connector
	<b>Audio</b>	1Ch Input/Output (3.5mm)
	<b>Alarm</b>	1Ch Input/Output (Screw Terminal Connector)
	<b>Reset Button</b>	Yes
<b>General</b>	<b>Onboard Storage</b>	Yes Built in Micro SD/SDHC/SDXC slot, up to 256GB
	<b>Operating Conditions</b>	-30°C ~ 50°C (-22°F ~ 122°F) , Less than 90% RH
	<b>Power Supply</b>	12VDC / POE (IEEE 802.3af)
	<b>Power Consumption &amp; Current</b>	3.5W (IR LED OFF), 8W Max (IR LED ON)
	<b>Weatherproof Rating</b>	IP67
	<b>Housing Material / Color</b>	Aluminum / White
	<b>Overall Camera Dimensions</b>	9.1" x 2.9" x 3.1" (232 x 74.8 x 80mm)
	<b>Weight</b>	1.5lb / 700g
	<b>Certifications</b>	CE / FCC

Note: Specification subject to change without notice

# N2IP4DSD / N2IP4D4MMSD



## N2 "SD" Series 4MP IP, True WDR, Outdoor IR Dome Cameras POE, 2.8mm or 4mm IR Lens, 100' IR, IP67/IK10, SD Card Slot



### FEATURES:

- ◆ H.265 & H.264 Compression
- ◆ True Wide Dynamic Range - 120dB
- ◆ Up to 2592 x 1520 Resolution
- ◆ Fixed Focal 2.8mm or 4mm IR Lens
- ◆ 2 High Power IR LED's - 100' IR Range
- ◆ SD Card Slot - Supports 256Gb
- ◆ Mechanical IR Cut Filter
- ◆ Triple Stream Capability
- ◆ Audio Line In/Out & Alarm
- ◆ 3D Digital Noise Reduction
- ◆ POE - Power over Ethernet
- ◆ Free CMS Software
- ◆ ONVIF Profile S/G/Q Compliant
- ◆ IK10 Impact Resistance
- ◆ IP67 Weatherproof

### INCLUDED ACCESSORIES:

Quick Guide, Mounting Template, Hardware Packet, Adjustment Wrench, Waterproof Connector.

### OPTIONAL MOUNTING ACCESSORIES:

**N2JB2** - Junction Box



**N2PC2** - Pendant Cap



**N2CPM1** - Pendant Mount  
(Requires N2PC2)



**N2HWM1** - Wall Mount  
(Requires N2PC2)



**N2POLEMT2** - Pole Mount  
(Requires N2PC2 & N2HWM1)

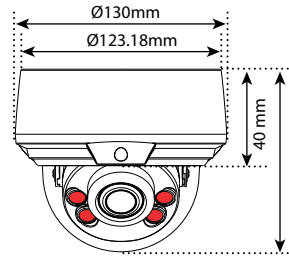


	FEATURES	N2IP4DSD	N2IP4D4MMSD
Camera	Image Sensor	1/2.8" Progressive Scan CMOS	
	Minimum Illumination	Color: 0.01Lux @(F1.2,AGC ON) , B/W: 0Lux @(IR LED ON)	
	S/N Ratio	55dB	
	IR LED Count / Range / Nanometer	2 High Power IR LED's / 100' Range / 850nm	
	Shutter Time	1/5s - 1/20,000s	
	Lens (IR Corrective)	Fixed 2.8mm - Angle of View 100°	Fixed 4mm - Angle of View 85°
	Camera Bracket Adjustment	Pan: 0°-350°, Tilt: 0°-75°, Rotation: ±90°	
	Day & Night	Yes - True Day/Night with IR Filter - Auto Switch	
	DNR (Digital Noise Reduction)	2DNR & 3DNR, Auto / Manual (0-100 Adjustable)	
	True Wide Dynamic Range (120dB)	On / Off (0-100 Adjustable)	
	BLC (Backlight Compensation)	On / Off (0-100 Adjustable)	
	Smart Analytic Features	Perimeter, Single Virtual Fence, Double Virtual Fence	
	Region of Interest	Yes	
Audio Compression	G.711, RAW_PCM		
Video Compression	H.265, H.264, MJPEG (for all stream types)		
Resolution/Bitrate	Max. Resolution	2592 x 1520 (4MP)	
	Mainstream Resolution	2592x1520, 2560x1440, 2304x1296, 1920x1080, 1280x720 @25/30FPS	
	Substream Resolution	D1, VGA, 640x360, CIF, QVGA @25/30fps	
	Third Stream Resolution	VGA, CIF, QVGA @25/30FPS	
Audio Bitrate		8kbps, 16kbps, 64kbps	
	Video Bitrate	Main: 500kbps ~ 12000kbps	
		Sub: 100kbps ~ 6000kbps	
		Third: 100kbps ~ 3000kbps	
Network	Protocols	IPv4/IPv6, 802.1x, HTTP, HTTPS, TCP/IP, UDP/IP, RTSP, DHCP, NTP, RTP/RTCP, PPPoE, SMTP, DNS, UPnP, FTP, ARP, SNMP	
	General Function	Supports Mirror, Aisle Mode, Smart IR, Password Protection, Privacy Mask, Motion Detection	
	Users	Up to 10 Users	
	Client Software	NorthernView CMS, NorthernView Mobile App, NorthernView Tools	
Web Browser	IE11, Chrome, Firefox		
Interface	Communication Interface	1 Ethernet (10/100 Base-T) RJ-45 Connector	
	Audio	1Ch Input/Output (3.5mm)	
	Alarm	1Ch Input/Output (Screw Terminal Connector)	
	Reset Button	Yes	
	Onboard Storage	Yes Built in Micro SD/SDHC/SDXC slot, up to 256GB	
General	Operating Conditions	-30°C ~ 50°C (-22°F ~ 122°F) , Less than 90% RH	
	Power Supply	12VDC / POE (IEEE 802.3af)	
	Power Consumption & Current	3.5W (IR LED OFF), 8W Max (IR LED ON)	
	Weatherproof/ Impact Ratings	IP67/IK10	
	Housing Material / Color	Aluminum / White	
	Overall Camera Dimensions	φ4.3" x 3.4" (φ110 x 85.4mmmm)	
	Weight	0.86lb / 390g	
Certifications	CE / FCC		



# N2IP4AFDSD

## N2 "SD" Series 4MP IP, True WDR, Outdoor Varifocal IR Dome Camera POE, Autofocus 2.7~13.5mm IR Lens, 100' IR, IP66/IK10, SD Card Slot



Front View & Dimensions

### FEATURES:

- ◆ H.265 & H.264 Compression
- ◆ True Wide Dynamic Range - 120dB
- ◆ Up to 2592 x 1520 Resolution
- ◆ Autofocus 2.7~13.5mm IR Lens
- ◆ 15 IR LED's - 100' IR Range
- ◆ SD Card Slot - Supports 256Gb
- ◆ Mechanical IR Cut Filter
- ◆ Triple Stream Capability
- ◆ Audio Line In/Out & Alarm
- ◆ 3D Digital Noise Reduction
- ◆ POE - Power over Ethernet
- ◆ Free CMS Software
- ◆ ONVIF Profile S/G/Q Compliant
- ◆ IK10 Impact Resistance
- ◆ IP66 Weatherproof

### INCLUDED ACCESSORIES:

Quick Guide, Mounting Template, Hardware Packet, Adjustment Wrench, Waterproof Connector.

### OPTIONAL MOUNTING ACCESSORIES:

**N2JB5** - Junction Box



**N2PC5** - Pendant Cap



**N2CPM1** - Pendant Mount  
(Requires N2PC5)



**N2HWM1** - Wall Mount  
(Requires N2PC5)



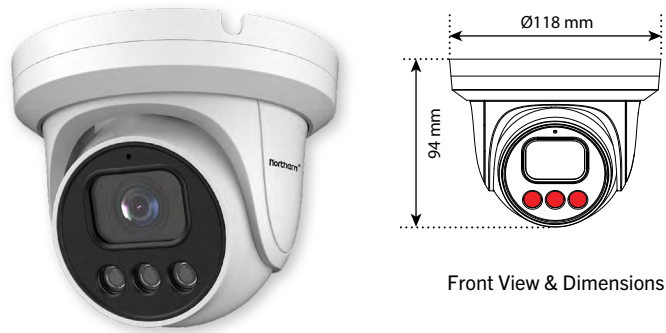
**N2POLEMT2** - Pole Mount  
(Requires N2PC5 & N2HWM1)

Note: Specification subject to change without notice

	FEATURES	N2IP4AFDSD	
Camera	Image Sensor	1/2.8" Progressive Scan CMOS	
	Minimum Illumination	Color: 0.05Lux @(F1.2,AGC ON) , B/W: 0Lux @(IR LED ON)	
	S/N Ratio	55dB	
	IR LED Count / Range / Nanometer	4 High Power IR LED's - 100' IR Range / 850nm	
	Shutter Time	1/5s - 1/20,000s	
	Lens Type / Viewing Angle	Autofocus 2.7-13.5mm with Remote Zoom / H: 34.3° - 103°	
	Camera Bracket Adjustment	Pan: 0°-355°, Tilt: 0°-80°, Rotation: 0°-355°	
	Day & Night	Yes - True Day/Night with IR Filter - Auto Switch	
	DNR (Digital Noise Reduction)	2DNR & 3DNR, Auto / Manual (0-100 Adjustable)	
	True Wide Dynamic Range (120dB)	On / Off (0-100 Adjustable)	
	BLC (Backlight Compensation)	On / Off (0-100 Adjustable)	
	Smart Analytic Features	Perimeter, Single Virtual Fence, Double Virtual Fence	
	Region of Interest	Yes	
Audio Compression	G.711, RAW_PCM		
Video Compression	H.265, H.264, MJPEG (for all stream types)		
Resolution/Bitrate	Max. Resolution	2592 x 1520 (4MP)	
	Mainstream Resolution	2592x1520, 2560x1440, 2304x1296, 1920x1080, 1280x720 @25/30FPS	
	Substream Resolution	D1, VGA, 640x360, CIF, QVGA @25/30fps	
	Third Stream Resolution	VGA, CIF, QVGA @25/30FPS	
Audio Bitrate		8kbps, 16kbps, 64kbps	
	Video Bitrate	Main: 500kbps ~ 12000kbps	
		Sub: 100kbps ~ 6000kbps	
		Third: 100kbps ~ 3000kbps	
Network	Protocols	IPv4/IPv6, 802.1x, HTTP, HTTPS, TCP/IP, UDP/IP, RTSP, DHCP, NTP, RTP/RTCP, PPPoE, SMTP, DNS, UPnP, FTP, ARP, SNMP	
	General Function	Supports Mirror, Aisle Mode, Smart IR, Password Protection, Privacy Mask, Motion Detection	
	Users	Up to 10 Users	
	Client Software	NorthernView CMS, NorthernView Mobile App, NorthernView Tools	
Web Browser	IE11, Chrome, Firefox		
Interface	Communication Interface	1 Ethernet (10/100 Base-T) RJ-45 Connector	
	Audio	1Ch Input/Output (3.5mm)	
	Alarm	1Ch Input/Output (Screw Terminal Connector)	
	Reset Button	Yes	
	Onboard Storage	Yes Built in Micro SD/SDHC/SDXC slot, up to 256GB	
General	Operating Conditions	-30°C ~ 50°C (-22°F ~ 122°F) , Less than 90% RH	
	Power Supply	12VDC / POE (IEEE 802.3af)	
	Power Consumption & Current	3.5W (IR LED OFF), 8W Max (IR LED ON)	
	Weatherproof Rating	IP66/IK10	
	Housing Material / Color	Aluminum / White	
	Overall Camera Dimensions	φ5.1" x 4.84" (φ130 x 123.18mm)	
	Weight	1.5lb / 690g	
Certifications	CE / FCC		

## N2 "SD" Series 4MP IP, True WDR, Outdoor IR Turret Camera

POE, 2.8mm IR Lens, 100' IR, IP67, SD Card Slot



Front View & Dimensions

### FEATURES:

- ◆ H.265 & H.264 Compression
- ◆ True Wide Dynamic Range - 120dB
- ◆ Up to 2592 x 1520 Resolution
- ◆ Fixed Focal 2.8mm IR Lens
- ◆ 1 High Power IR LED - 100' IR Range
- ◆ SD Card Slot - Supports 256Gb
- ◆ Mechanical IR Cut Filter
- ◆ Triple Stream Capability
- ◆ 3D Digital Noise Reduction
- ◆ POE - Power over Ethernet
- ◆ Free CMS Software
- ◆ ONVIF Profile S/G/Q Compliant
- ◆ IP67 Weatherproof

### INCLUDED ACCESSORIES:

Quick Guide, Mounting Template, Hardware Packet, Adjustment Wrench, Waterproof Connector.

### OPTIONAL MOUNTING ACCESSORIES:

N2JB3 - Junction Box



N2PC3 - Pendent Cap



N2CPM1 - Pendent Mount (Requires N2PC3)



N2HWM1 - Wall Mount (Requires N2PC3)



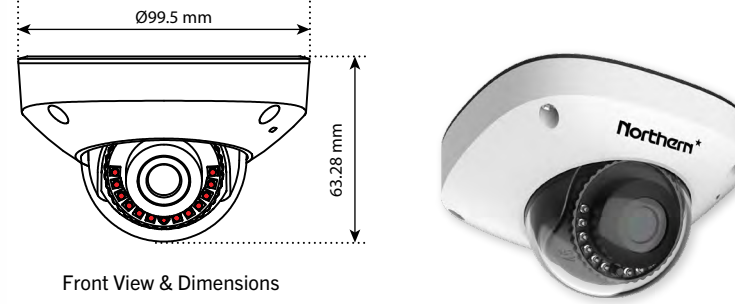
N2POLEMT2 - Pole Mount (Requires N2PC3 & N2HWM1)



	FEATURES	N2IP4TSD	
Camera	Image Sensor	1/2.8" Progressive Scan CMOS	
	Minimum Illumination	Color: 0.01Lux @(F1.2,AGC ON) , B/W: 0Lux @(IR LED ON)	
	S/N Ratio	55dB	
	IR LED Count / Range / Nanometer	1 High Power IR LED / 100' Range / 850nm	
	Shutter Time	1/5s - 1/20,000s	
	Lens (IR Corrective)	Fixed 2.8mm - Angle of View 100° -	
	Camera Bracket Adjustment	Pan: 0°~360°, Tilt: 0°~90°, Rotation: 0°~360°	
	Day & Night	Yes - True Day/Night with IR Filter - Auto Switch	
	DNR (Digital Noise Reduction)	2DNR & 3DNR, Auto / Manual (0-100 Adjustable)	
	True Wide Dynamic Range (120dB)	On / Off (0-100 Adjustable)	
	BLC (Backlight Compensation)	On / Off (0-100 Adjustable)	
	Smart Analytic Features	Perimeter, Single Virtual Fence, Double Virtual Fence	
	Region of Interest	Yes	
	Video Compression	H.265, H.264, MJPEG (for all stream types)	
Resolution/Bitrate	Max. Resolution	2592 x 1520 (4MP)	
	Mainstream Resolution	2592x1520, 2560x1440, 2304x1296, 1920x1080, 1280x720 @25/30FPS	
	Substream Resolution	D1, VGA, 640x360, CIF, QVGA @25/30fps	
	Third Stream Resolution	VGA, CIF, QVGA @25/30FPS	
	Video Bitrate	Main:	500kbps ~ 12000kbps
		Sub:	100kbps ~ 6000kbps
Third:		100kbps ~ 3000kbps	
Network	Protocols	IPv4/IPv6, 802.1x, HTTP, HTTPS, TCP/IP, UDP/IP, RTSP, DHCP, NTP, RTPC/RTP, PPPoE, SMTP, DNS, UPnP, FTP, ARP, SNMP	
	General Function	Supports Mirror, Aisle Mode, Smart IR, Password Protection, Privacy Mask, Motion Detection	
	Users	Up to 10 Users	
	Client Software	NorthernView CMS, NorthernView Mobile App, NorthernView Tools	
	Web Browser	IE11, Chrome, Firefox	
Interface	Communication Interface	1 Ethernet (10/100 Base-T) RJ-45 Connector	
	Audio	1Ch Input/Output (3.5mm)	
	Alarm	1Ch Input/Output (Screw Terminal Connector)	
	Reset Button	Yes	
	Onboard Storage	Yes Built in Micro SD/SDHC/SDXC slot, up to 256GB	
	General	Operating Conditions	-30°C ~ 50°C (-22°F ~ 122°F), Less than 90% RH
Power Supply		12VDC / POE (IEEE 802.3af)	
Power Consumption & Current		3.5W (IR LED OFF), 8W Max (IR LED ON)	
Weatherproof Rating		IP67	
Housing Material / Color		Aluminum / White	
Overall Camera Dimensions		4.6" x 4.1" (118x103mm)	
Weight		1.3lb / 610g	
Certifications	CE / FCC		

## N2 "SD" Series 4MP IP, True WDR, Outdoor IR Wedge Camera

POE, 2.8mm IR Lens, 45' IR, IP66, SD Card Slot



Front View & Dimensions

### FEATURES:

- ◆ H.265 & H.264 Compression
- ◆ True Wide Dynamic Range - 120dB
- ◆ Up to 2592 x 1520 Resolution
- ◆ Fixed Focal 2.8mm IR Lens
- ◆ 12 IR LED's - 45' IR Range
- ◆ SD Card Slot - Supports 128Gb
- ◆ Mechanical IR Cut Filter
- ◆ Triple Stream Capability
- ◆ Built-in Microphone & Alarm
- ◆ 3D Digital Noise Reduction
- ◆ POE - Power over Ethernet
- ◆ Free CMS Software
- ◆ ONVIF Profile S/G/Q Compliant
- ◆ IP66 Weatherproof

### INCLUDED ACCESSORIES:

Quick Guide, Mounting Template, Hardware Packet, Adjustment Wrench, Waterproof Connector.

### OPTIONAL MOUNTING ACCESSORIES:

N2JB4 - Junction Box



N2PC4 - Pendent Cap



N2CPM1 - Pendent Mount (Requires N2PC4)



N2HWM1 - Wall Mount (Requires N2PC4)



N2POLEMT2 - Pole Mount (Requires N2PC4 & N2HWM1)



	FEATURES	N2IP4WSD	
Camera	Image Sensor	1/2.8" Progressive Scan CMOS	
	Minimum Illumination	Color: 0.01Lux @(F1.2,AGC ON) , B/W: 0Lux @(IR LED ON)	
	S/N Ratio	55dB	
	IR LED Count / Range / Nanometer	12 IR LED's / 45' Range / 850nm	
	Shutter Time	1/5s - 1/20,000s	
	Lens (IR Corrective)	Fixed 2.8mm - Angle of View 100° -	
	Camera Bracket Adjustment	Pan: ±45°, Tilt: 0°~90°, Rotation: 0°~360°	
	Day & Night	Yes - True Day/Night with IR Filter - Auto Switch	
	DNR (Digital Noise Reduction)	2DNR & 3DNR, Auto / Manual (0-100 Adjustable)	
	True Wide Dynamic Range (120dB)	On / Off (0-100 Adjustable)	
	BLC (Backlight Compensation)	On / Off (0-100 Adjustable)	
	Smart Analytic Features	Perimeter, Single Virtual Fence, Double Virtual Fence	
	Region of Interest	Yes	
	Audio Compression	G.711, RAW_PCM	
Video Compression	H.265, H.264, MJPEG (for all stream types)		
Resolution/Bitrate	Max. Resolution	2592 x 1520 (4MP)	
	Mainstream Resolution	2592x1520, 2560x1440, 2304x1296, 1920x1080, 1280x720 @25/30FPS	
	Substream Resolution	D1, VGA, 640x360, CIF, QVGA @25/30fps	
	Third Stream Resolution	VGA, CIF, QVGA @25/30FPS	
	Audio Bitrate	Main:	8kbps, 16kbps, 64kbps
		Sub:	100kbps ~ 6000kbps
Third:		100kbps ~ 3000kbps	
Network	Protocols	IPv4/IPv6, 802.1x, HTTP, HTTPS, TCP/IP, UDP/IP, RTSP, DHCP, NTP, RTPC/RTP, PPPoE, SMTP, DNS, UPnP, FTP, ARP, SNMP	
	General Function	Supports Mirror, Aisle Mode, Smart IR, Password Protection, Privacy Mask, Motion Detection	
	Users	Up to 10 Users	
	Client Software	NorthernView CMS, NorthernView Mobile App, NorthernView Tools	
	Web Browser	IE11, Chrome, Firefox	
Interface	Communication Interface	1 Ethernet (10/100 Base-T) RJ-45 Connector	
	Audio	1Ch Input/Output (RCA), Built in Mic.	
	Alarm	1Ch Input/Output (Bare Lead)	
	Reset Button	Yes	
	Onboard Storage	Yes Built in Micro SD/SDHC/SDXC slot, up to 128Gb	
	General	Operating Conditions	-30°C ~ 50°C (-22°F ~ 122°F), Less than 90% RH
Power Supply		12VDC / POE (IEEE 802.3af)	
Power Consumption & Current		3.5W (IR LED OFF), 6W Max (IR LED ON)	
Weatherproof Rating		IP66	
Housing Material / Color		Metal Body with Plastic Cover / White	
Overall Camera Dimensions		3.9" x 3.9" x 2.4" (99.5 x 99.5 x 63mm)	
Weight		0.8lb / 370g	
Certifications	CE / FCC		

Note: Specification subject to change without notice



## N2 "SD" Series 2MP IP, True WDR, Outdoor IR PTZ Camera POE, 30X IR Zoom Lens, 600' IR, IP66, SD Card Slot

### FEATURES:

- ◆ Full HD 1080p Real Time Video
- ◆ True 120dB Wide Dynamic Range
- ◆ Intelligent Auto Tracking
- ◆ 30X Optical Zoom (4.5 ~135mm)
- ◆ POE Power Over Ethernet
- ◆ Included HI-POE Injector
- ◆ Included Wall Mount
- ◆ Free CMS Software
- ◆ True D/N Mechanical IR Cut Filter
- ◆ 10 High Power IR LED's, 600' IR Range
- ◆ SD Card Slot - Supports 128Gb
- ◆ 360° Endless Panning
- ◆ 400 Preset Postions
- ◆ 6 Tracks, 12 Tours, 12 Scans
- ◆ Audio Line In/Out
- ◆ 7 Alarm Inputs / 2 Outputs
- ◆ Built in Heater & Fan
- ◆ -40° Operating Temperature
- ◆ IP66 Weatherproof

### INCLUDED ACCESSORIES:

Quick Setup Guide, Wall Mount, Hi POE Injector, Slotted Screw Driver, Gloves, Stainless Hex Screw M5\*9mm, Stainless Hex Screw M6\*14mm x3, Terminal Block x2, Bracket Connector x3

### OPTIONAL MOUNTING ACCESSORIES:

**N2PTZPOLEMT** - PTZ Pole Mount \*

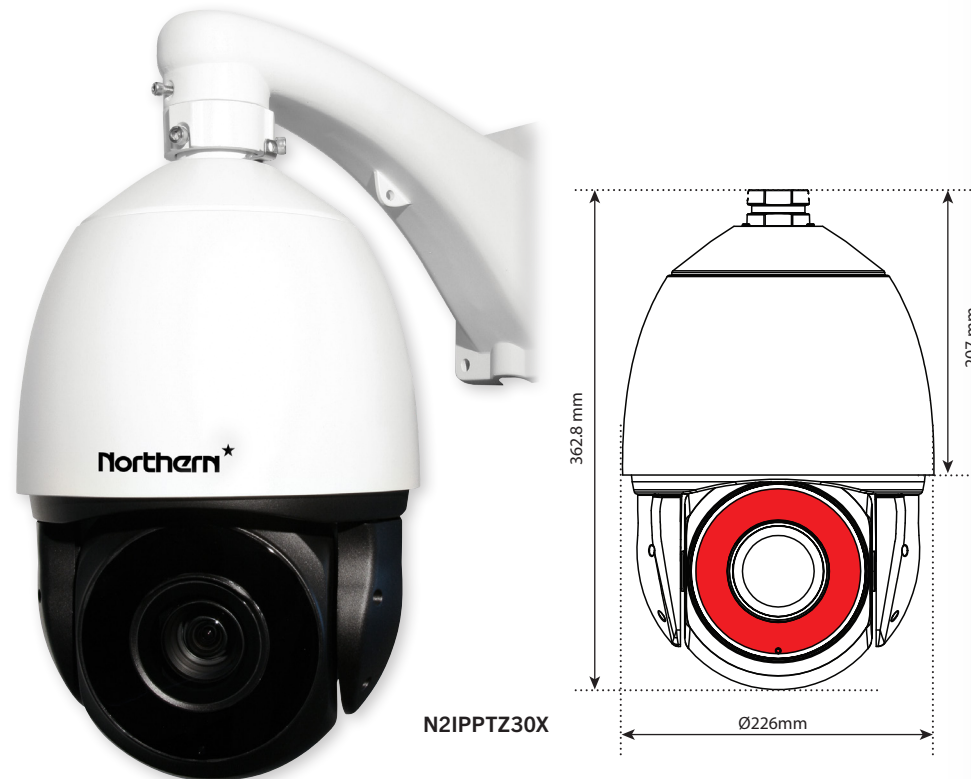
**N2PTZCRNMT** - PTZ Outside Corner Mount \*

**N2PTZPENDMT** - Pendant Mount

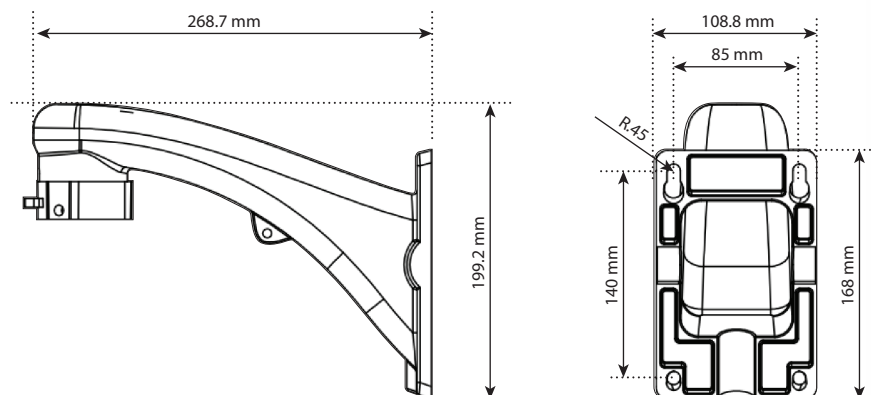
**N2PTZJB** - Junction Box



\* Pole & Corner Mount are compatible with N2IPPTZ30XSD wall mount & N2PTZJB



### WALL MOUNT DIMENSIONS:



	SPECIFICATION	N2IPPTZ30XSD
<b>Camera</b>	Image Sensor	1/2.8" Progressive Scan CMOS
	Image Resolution	2 Megapixel, 1920 x 1080 Max
	Min. Illumination	Color: 0.01Lux @(F1.2, AGC ON), B/W: 0.0 Lux (IR LED ON)
	White Balance	Auto / Tungsten / Daylight / Manual (Red & Blue Gain Adjustable)
	AGC	Auto / Manual (0 - 100 Adjustable)
	S/N Ratio	55dB
	2DNR & 3DNR	Auto / Manual (0 - 100 Adjustable)
	BLC & HLC	Yes (0 - 100 Adjustable)
	True WDR	Yes 120dB (0 - 100 Adjustable)
	Defog	Yes (0 - 100 Adjustable)
	Shutter Speed	Auto / Manual, 1/5 - 1/20,000s
	True Day & Night	Yes - Mechanical IR Cut Filter
	Optical / Digital Zoom	30X Optical Zoom - 16x Digital Zoom
	Privacy Mask	Yes - On / Off, 4 Area, Size & Color Adjustable
	Focus Mode	Auto, Manual, Semi-Auto, Sensitivity Adjustable (0 - 100)
Auto Tracking	Yes	
<b>Lens</b>	Focal Length	4.5 ~ 135mm, F1.6 ~ F4.4
	Zoom Speed	Approx. 4 sec. (Optical, Wide-Tele)
	Angle of View	Horizontal: 59.8° ~ 2.3°
	Min. Working Distance	1.5 Meters
<b>Pan &amp; Tilt</b>	Pan / Tilt Range	Pan: 0° ~ 360° endless, Tilt: -10° ~ +90°
	Pan / Tilt Speed	Manual: Pan: 0.1° ~180° /s, Tilt: 0.1° ~90° /s, Preset: Pan: 180° /s, Tilt: 90° /s
	Proportional Zoom	Rotation Speed Adjusted Automatically According to Zoom
	Number of Presets	400
	Idle Action	Activates: Preset / Scan / Tour / Track if no command in the specified period
	Track / Tour / Scan	6 -Tracks (Custom Pattern) / 12 Tours (Preset Pos.) / 12 Scans (Custom Pattern)
	Power-off Memory	On/Off - Preset, Scan, Track, Tour Selectable
	Position Display	Yes
<b>IR</b>	Scheduled Tasks	Up to 8/Day Preset, Scan, Track, Tour
	IR Distance	600'
<b>Input / Output</b>	IR Intensity	Automatically Adjusted, Depending on the Zoom Ratio
	Alarm Input / Output	7 Ch Input / 2 Ch Output
	Alarm Trigger	Perimter, Single & Double Virtual Fence, Loiter, Object Left & Removal
	Alarm Actions	Preset, Track, Tour, Scan, Recording, Relay Output, Email Linkage
<b>Network</b>	Audio Input / Output	1x RCA Female / 1x RCA Female
	Ethernet	1 Ethernet (10/100 Base-T) RJ-45 Connector
	Frame Rate	Stream 1: 1920x1080/1280x720 @25/30fps
		Stream 2: D1/VGA/640x360/CIF/QVGA @25/30fps
		Stream 3: VGA/CIF/QVGA @25/30fps
	Compression	H.265, H.264, MJPEG
	ROI	Yes
	Audio Compression	G.711, RAW_PCM
	Protocols	IPv4/IPv6, 802.1x, HTTP, HTTPS, TCP/IP, UDP/IP, RTSP, DHCP, NTP, RTPC/RTP, PPPoE, SMTP, DNS, UPnP, FTP, ARP, SNMP, Onvif
	Simultaneous View	10 Max
SD Card	Yes - Micro SD card slot - 128Gb Max (Card not included)	
<b>General</b>	Users	10 Max
	Security	User Authentication (ID & Password), IP Filter (Black/White List), HTTPS
	Web Browser	<IE11, Chrome, Firefox
	Power Input	AC24V/Hi-POE
Power Consumption	/ Less than 40W	
Operating Temp	-40°C ~ 60°C (-40°F ~ 140°F)	
Protection Level	IP66, TVS4000V	
Dimensions	226x362.8mm (2.9" x 14.28")	
Certifications	CE / FCC	
Weight (approx.)	5.2Kg (11.4lb)	

Note: Specification subject to change without notice

# N3HVR Series 5-in-1 Hybrid DVR



# N3HVR Series 5-in-1 Hybrid DVR

## N3HVR4

4-Channel 5-in-1 Hybrid DVR

## N3HVR8

8-Channel 5-in-1 Hybrid DVR

## N3HVR16

16-Channel 5-in-1 Hybrid DVR

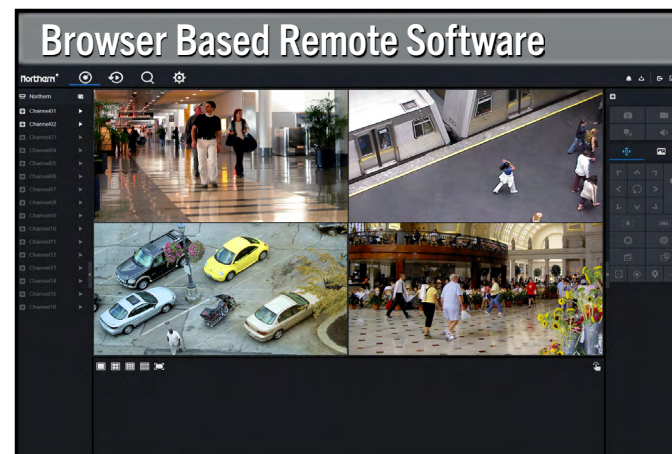
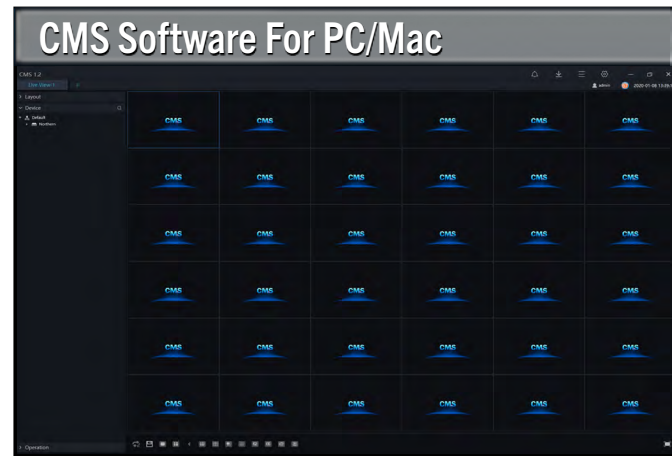
4  
8  
16



**NORTHERN VIEW**  
Free Mobile App for iPhone,  
iPad, Android™ & Android™ Tablets

### FEATURES:

- ◆ Compatible with TVI, CVI, AHD & 960H Formats
- ◆ Up to 1080p Analog Recording @ 15FPS
- ◆ Up to 8MP Lite Analog Recording @ 7FPS (4Ch)
- ◆ Full Hybrid - All Channels Analog or IP
- ◆ Up to 1080p IP Camera Recording
- ◆ Up to 8TB Storage Capacity (4Ch)
- ◆ Up to 16TB Storage Capacity (8 & 16Ch)
- ◆ H.264 & H.265 Recording Compression
- ◆ NorthernView Mobile App for iPhone, iPad & Android™
- ◆ Built-in Motion Detection & Privacy Mask
- ◆ UTC Control (Camera Dependent)
- ◆ Up to 16Ch Synchronous Playback
- ◆ Free CMS Software Included
- ◆ Supports P2P Operation
- ◆ Included Mouse for Control
- ◆ Front & Rear USB
- ◆ HDMI & VGA Main Monitor Outputs
- ◆ BNC Spot Monitor Output
- ◆ Built in Audio / Built in Alarm (8 & 16 Ch.)



### Learn More

#### 5-in-1 Compatibility

N3HVR Series is compatible with IP Cameras and the following HD Analog Camera Formats: TVI, CVI, AHD & 960H.

#### Mobile Apps for iPhone, iPad & Android™

View & Playback Video from multiple mobile devices with the Free NorthernView mobile app.

#### Up to 8MP Analog Recording

See increased detail with up to 8MP Lite recording on all N3HVR Series recorders. (4Ch-7FPS, 8/16Ch-8FPS Max).

#### H.265 Compression

H.265 compression format provides both increased video quality and reduced bandwidth consumption.

#### Up to 16TB Storage Capacity

Large Hard Disk storage capacity allows for longer storage of recorded video. 16TB Max for 8 & 16 Channel, 8TB Max for 4 Channel Models.

#### Free CMS Software for PC & Mac

Connect to multiple DVR's from a single computer with the included Northern CMS software. Also compatible with all N2 Series Northern IP Cameras & N2/N3 Series NVR's.

#### HDMI, VGA & BNC Monitor Outputs

Simultaneously display video via HDMI, VGA and BNC main monitor output.

#### P2P Operation

Peer to Peer function in NorthernView app makes set up easier by bypassing the need to configure port forwarding in most routers.

#### Remote Accessibility

Remotely connect, monitor, playback, record and change DVR settings via IE browser.

#### UTC Control of Camera OSD

Up the Coax control can be used to access the OSD menu and configure cameras settings from the DVR locally or remotely.

#### Additional IP Recording

4 Channel models can record an additional 2 IP cameras. 8 Channel models can record an additional 4 IP Cameras and 16 Channel models can record up to 8 IP cameras.

#### Full Hybrid Recorders

Disabling all Analog Channels allows for recording up to 6 IP Cameras on 4 Ch models, 12 IP Cameras on 8Ch models and 24 IP Cameras on 16Ch models.

#### Supports DDNS

DDNS insures you will always stay connected to your DVR when using a Dynamic IP address.

### Recorder Model Numbers

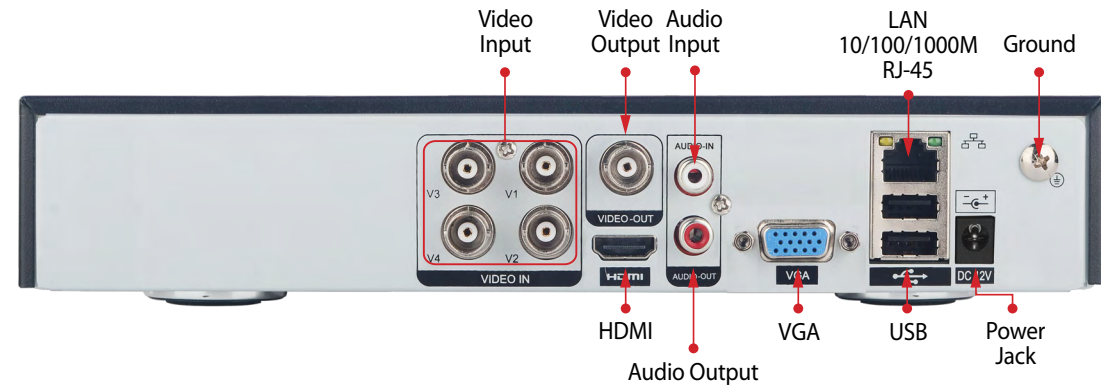
4Ch & 8Ch Models Offered as Base Models with No Storage or with 2TB Built-in Drives, 16Ch Models Offered as Base Models with No Storage or with 2TB & 4TB Built-In Drives. Other Drive Configurations Require Separate Base Model Recorder & Hard Drive/s. See chart below.

Recorder	4 Channel	8 Channel	16 Channel
No Storage	N3HVR4	N3HVR8	N3HVR16
2TB	N3HVR42T (Built-In Drive)	N3HVR82T (Built-In Drive)	N3HVR162T (Built-In Drive)
4TB	N3HVR4 + NORTHERN-WD42PURZ	N3HVR8 + NORTHERN-WD42PURZ	N3HVR164T (Built-In Drive)
6TB	N3HVR4 + NORTHERN-WD63PURZ	N3HVR8 + NORTHERN-WD63PURZ	N3HVR16 + NORTHERN-WD63PURZ
8TB	N3HVR4 + NORTHERN-WD8001PURP	N3HVR8+ NORTHERN-WD8001PURP	N3HVR16 + NORTHERN-WD8001PURP
12TB	N/A	N3HVR8 + (2)NORTHERN-WD63PURZ	N3HVR16 + (2)NORTHERN-WD63PURZ
16TB	N/A	N3HVR8 + (2)NORTHERN-WD8001PURP	N3HVR16 + (2)NORTHERN-WD8001PURP

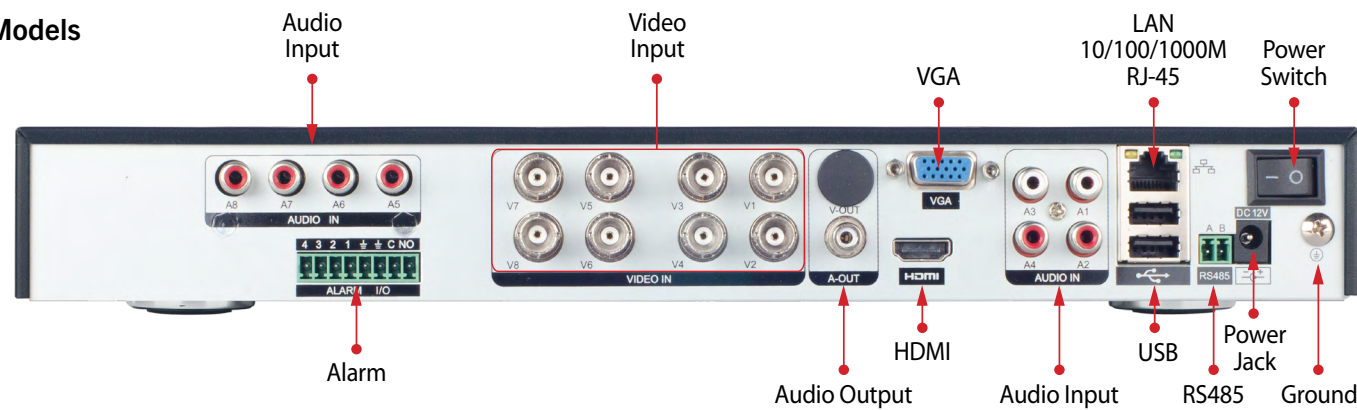
Note: Specification subject to change without notice

## Rear Panel Connections

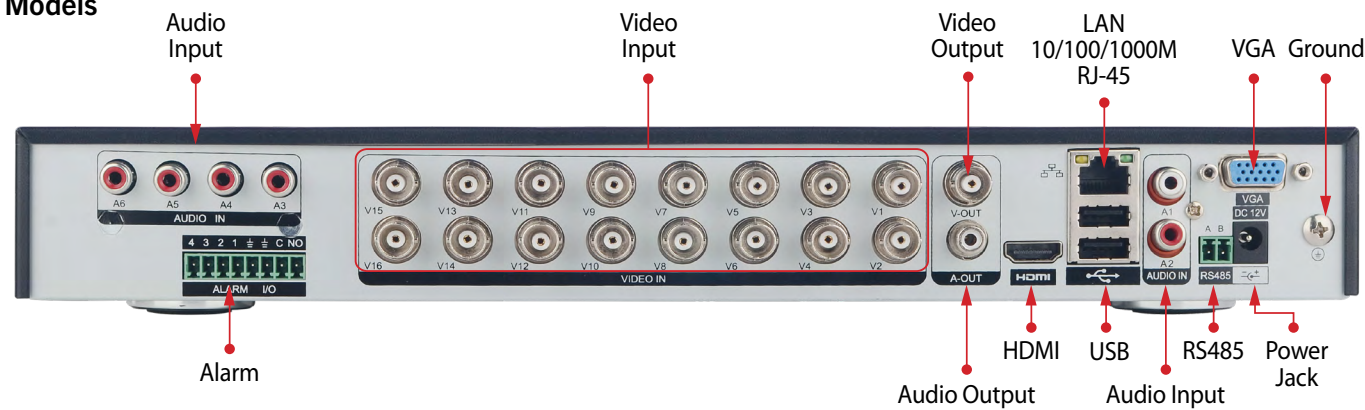
### 4 Ch. Models



### 8 Ch. Models



### 16 Ch. Models



**PACKAGE CONTENTS**

- Power Supply / Cord
- Quick Start Manual
- Rack Mount Ears (8 & 16Ch)
- Mouse
- Hardware Packet

## N3HVRPOE Series Specifications

	FEATURES	N3HVR4	N3HVR8	N3HVR16
Video/Audio Input	Video Compression	H.265+, H.265, H.264+, H.264		
	Analog Video Input	4-Channel	8-Channel	16-Channel
	TVI/CVI/AHD/Formats	BNC Interface (1.0Vp-p, 75Ω)		
	960H Format	8MP(Lite) / 5MP / 4MP / 3MP / 1080p / 720p		
	IP Channels (1080p Max)	4+2	8+4	16+8
	Audio Compression	G.711A		
	Audio Input	1-Ch. RCA Input	8-Ch RCA Inputs	6-Ch RCA Inputs
Video/Audio Output	BNC Output	1x CVBS 640x480 Max	N/A	1x CVBS 640x480 Max
	HDMI Output	1x HDMI 3840x2160, 1920x1080, 1280x1024, 1024x768		
	VGA Output	1x VGA 1920x1080, 1280x1024, 1024x768		
	Frame Rate	4Ch Main stream: 7fps@8MP Lite, 6fps@5MP, 7fps@4MP, 15fps@1080p, 30fps@720p&960H	8Ch/16Ch Main stream: 8fps@8MP Lite, 7fps@5MP, 8fps@4MP, 15fps@1080p, 30fps@720p&960H	
	Record Resolution	Sub Stream: 15FPS @ 704x480, 640x360, 480x270, 352x288		
	Record Resolution	960x576(960H), 1280x720(720p), 1920x1080(1080p), 2560x1440(4MP), 2560x1920(5MP), 1280x1440(8MP-Lite)		
	Video Bit Rate	Main Stream: 126Kbps ~ 4096kbps / Sub Stream: 16Kbps ~ 1024kbps		
	Audio Output	1-Channel RCA Output		
	Audio Bit Rate	128kbps		
	Dual Stream	Yes - Supports		
Stream Type	Video / (Audio Recording Stream Enabled via Record Setup)			
Synchronous Playback	4 Channel	8 Channel	16 Channel	
Multi Screen Viewing	1, 4, 6	1, 4, 8, 12	1, 4, 8, 9, 16, 24, 25	
Network Mgmt.	Remote Connections	Up to 4 Simultaneous Connections		
	Network Protocols	HTTP, HTTPS, TCP/IP, IPv4, UPnP, UDP, RTSP, SMTP, NTP, DNS, DHCP, P2P, IP Filter, DDNS, 802.1X, SNMP		
Hard Disk	SATA	1 x SATA (8TB Max Drive Size)	2 x SATA (8TB Max Drive Size)	
	Capacity	Up to 8TB	Up to 16TB	
Ext. Interface	Network Interface	1 RJ-45 port (10/100Mbps)		
	USB Interface	USB x 2 (Front & Rear)		
	Serial Interface	N/A	1 x RS485	
	Alarm In/Out	N/A	4 In / 1 Out	
	Mobile App	NorthernView Mobile App for iPhone, iPad & Android™		
General	Power Supply	DC 12Volt, 2Amp	DC 12Volt, 4Amp	
	Consumption (no drives)	Max 5W	Max 10.5W	
	Operating Temp	-10 °C ~ 50 °C (14 °F ~ 122 °F)		
	Operating Humidity	Less than 90% RH		
	Dimensions (L x W x H)	2.1"x 9.6"x 1.7" (255 x 244 x 44mm)	13.8" 12" x 1.9" (350 x 305 x 49mm)	
	Certifications	CE / FCC		
	Chassis	Non Rack Mount	1U Rack Mountable	
Weight (no drives)	1.9lb, 900g	3.9lb, 1.8kg	5.5lb, 2.5kg	

Note: Specification subject to change without notice

# N3HVR 4 & 8 Channel Kits



## N3HVR4KIT4C 4 Channel KIT



### KIT INCLUDES:

- 4-Channel N3HVR w/ 2TB Storage
- 4 x 1080p 2.8mm Eyeball Cameras w/ 60' IR

## N3HVR8KIT6C 8 Channel KIT



### KIT INCLUDES:

- 8-Channel N3HVR w/ 2TB Storage
- \*6 x 1080p 2.8mm Eyeball Cameras w/ 60' IR

\* Customize Your Kit with 2 Additional Northern HD Analog Cameras (see pages 23-42, sold separately)

### CAMERA FEATURES (HDEIR60):

- ◆ Multi Format (TVI, CVI, AHD, 960H)
- ◆ True Day/Night Mechanical IR Cut Filter
- ◆ 2.8mm Fixed Focal IR Lens
- ◆ 18 IR LED's / 60' IR Range
- ◆ UTC & Joystick Controllable OSD
- ◆ 3D Digital Noise Reduction
- ◆ 12 Volt DC Power
- ◆ IP66 Weatherproof

Full Specifications on Page 23



**GUARDING VISION**  
Free Mobile App for iPhone,  
iPad, Android & Android Tablets

### NVR FEATURES (N3HVR4/N3HVR8):

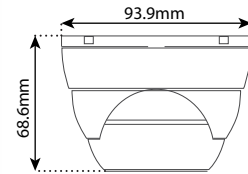
- ◆ Up to 1080p Analog Recording @ 15FPS
- ◆ 2 Terabyte Included Storage
- ◆ H.265 Recording Compression
- ◆ NorthernView Mobile App for iPhone, iPad & Android™
- ◆ Built-in Motion Detection & Privacy Mask
- ◆ Up to 8 Channel Synchronous Playback
- ◆ Free CMS Software Included
- ◆ Supports P2P Operation
- ◆ Included Mouse for Control
- ◆ Dual USBs for Copying Video/Mouse Control
- ◆ Simultaneous HDMI & VGA Outputs
- ◆ UTC Control of Cameras OSD

Full Specifications on Pages 18-21

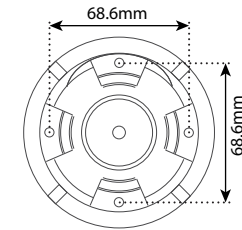


# HDEIR60/ HDDWMIR

## 4-in-1, 1080p Outdoor IR Eyeball Cameras D-WDR, True D/N IR Lens, 60' IR Range



Camera Dimensions



Side View / Bottom View  
& Mounting Configuration



### FEATURES:

- ◆ Multi Format (TVI, CVI, AHD, 960H)
- ◆ Full HD 1080p Resolution
- ◆ True Day/Night Mechanical IR Cut Filter
- ◆ Digital Wide Dynamic Range
- ◆ 3-Axis Wall or Ceiling Mountable
- ◆ 2.8mm Fixed Focal IR Lens – HDEIR60
- ◆ 3.6mm Fixed Focal IR Lens – HDDWMIR
- ◆ 3D Digital Noise Reduction
- ◆ 18 IR LED's / 60' IR Range – HDEIR60
- ◆ 12 IR LED's / 60' IR Range – HDDWMIR
- ◆ 12 Volt DC Power
- ◆ UTC & Joystick Controllable OSD
- ◆ 12 Volt DC Power
- ◆ IP66 Weatherproof

SPECIFICATION	HDEIR60	HDDWMIR
Image Sensor	1/2.8" CMOS Sensor	1/3" Sony CMOS Sensor
Total Pixels	1984 x 1225	
Active Pixels	1920 x 1080	
Resolution	1920 x 1080 (1080p)	
Scanning System	Progressive Scan	
OSD (On Screen Display)	Dual OSD Access: Cable Mounted Joystick Controlled / UTC Controlled (coaxial control)	
Digital WDR (Wide Dynamic Range)	Open / Close	Auto / Off / On - 0 ~ 8 Adjustable
DNR (Digital Noise Reduction)	3D DNR - Auto, Manual (0-10)	2D & 3D, Low, Middle, High, Off
Video Output	TVI, CVI, AHD & 960H (Selectable via OSD Cable)	Dual Pigtail HD-TVI Main Output (y) / 960H Secondary Output (b)
Lens Type	2.8mm IR Lens - H: 105° V: 56°	True Day Night 3.6mm Fixed Focal Lens
Sense-up		Off / x2 ~ x30
Shutter Speed		Auto, FLK, 1/30 ~ 1/50,000, x2 ~ x30
IR Cut Filter	Built in Mechanical	
Minimum Illumination	Color 0.01 Lux, B/W 0.0 Lux, IR LED ON	0.0 Lux IR LED On
IR LED Count / Range	18 IR LED's / 60' Range / 850nm	12 IR LED's / 60' Range / 850nm
S/N Ratio	More than 48dB	More than 50dB
Automatic Gain Control		0 ~100 Adjustable
Sync System	Internal	
Gamma Characteristics	y = 0.45 typ.	
White Balance	Gray/Pro/ MWB - R & B Gain 0-127 Adjustable	ATW / AWC->Set / Indoor / Outdoor / Manual
Back Light Compensation	Global / BLC 0-7 Adjustable	Off / BLC / HSBLC
HBLC (High Back Light Compensation)		On / Off
Day/Night	EXT / Auto / Color / B/W	
Mirror		Mirror / V-Flip / Rotate / Off
Languages	English, French, Spanish, German, Italian (see OSD Menu for more)	
Brightness	0 ~100 Adjustable	
Motion Detection		On/Off (4 Zone Selectable)
Privacy Mask		On/Off (4 Zone Selectable)
Power Input	12VDC Only	
Power Requirement	100mA /280 mA IR LED ON	120mA / 450mA IR LED ON
Overall Camera Dimensions	3.7" x 3.3" (ø94 x 84mm)	3.7" x 2.6" (95mm x 65mm)
Housing / Color	Aluminum / White	Aluminum - Gray
Weight	0.7lb / 318g	.75 Lb.
Operating Temperature	-14°F ~ 131°F	-14°F ~ 122°F
Weatherproof Rating	IP66	

Note: Specification subject to change without notice

### INCLUDED ACCESSORIES:

Camera, User Manual, Mounting Screws.

### OPTIONAL MOUNTING ACCESSORIES:

**N2JB1** - Junction Box



**N2PC1** - Pendant Cap



**N2CPM1** - Pendant Mount (Requires N2PC1)



**N2HWM1** - Wall Mount (Requires N2PC1)



**N2POLEMT2** - Pole Mount (Requires N2PC1 & N2HWM1)



## 4-in-1, 1080p Outdoor Ultra Wide Angle IR Eyeball Camera DWDR, True D/N, 2.5mm IR Lens, 60' IR Range, 150° FOV

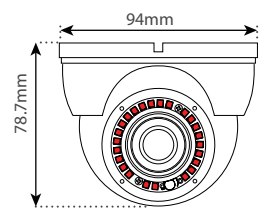
### FEATURES:

- ◆ 1/2.9" Sony CMOS Sensor
- ◆ Multi Format (TVI, CVI, AHD, 960H)
- ◆ Full HD 1080p Resolution
- ◆ 2.5mm/150° FOV Ultra Wide Angle Lens
- ◆ 24 IR LED's / 60' IR Range
- ◆ True Day/Night Mechanical IR Cut Filter
- ◆ Digital Wide Dynamic Range
- ◆ Cable & UTC OSD Control
- ◆ 3-Axis Wall or Ceiling Mountable
- ◆ Sense-up / Slow Shutter Speed
- ◆ 3D Digital Noise Reduction
- ◆ 12 Volt DC power / IP66 Weatherproof

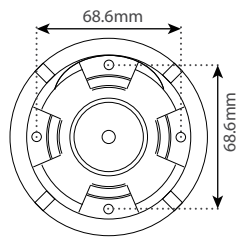
### INCLUDED ACCESSORIES:

User Manual, Mounting Screws

### CAMERA OVERVIEW:



Side View / Front View & Mounting Configuration



In-Line Cable Mounted OSD Control



SPECIFICATION	HDDWIDE
Image Sensor	1/2.9" Sony CMOS Sensor
Total Pixels	1984 x 1225
Active Pixels	1920 x 1080
Resolution	1920 x 1080 (1080p)
Scanning System	Progressive Scan
Dual OSD Control Access (On Screen Display)	Cable Mounted Joystick Controlled / UTC (coaxial) Controlled
Digital WDR (Wide Dynamic Range)	Auto / Off / On - 0 ~ 8 Adjustable
DNR (Digital Noise Reduction)	2D & 3D, Low, Middle, High, Of
Video Output	TVI, CVI, AHD & 960H Selectable via OSD Joystick
Lens Type - True Day Night	2.5mm Ultra-Wide Angle Fixed Lens (150° FOV)
Sense-up	Off / Auto (x2 ~ x30 Selectable)
Shutter Speed	Auto, FLK, 1/30 ~ 1/50,000, x2 ~ x30
IR Cut Filter	Built in Mechanical
Minimum Illumination	Color 1.0 Lux, B/W 0.5 Lux, IR LED ON 0.0 Lux
IR LED Count / Range	24 IR LED's / 60' Range / 850nm
S/N Ratio	More than 50dB
Automatic Gain Control	0 ~15 Adjustable
Sync System	Internal
Gamma Characteristics	y = 0.45 typ
White Balance	AWB / ATW / AWC->Set / Indoor / Outdoor / Manual
Back Light Compensation	Off / BLC / HSBLC
HBLC (High Back Light Compensation)	On / Of
Day/Night	EXT / Auto / Color / B/W
Mirror	Mirror / V-Flip / Rotate / Of
Languages	English, French, Spanish, German, Italian (see OSD Menu for more)
Brightness	0 ~100 Adjustable
Motion Detection	On/Off (4 Zone Selectable)
Privacy Mask	On/Off (4 Zone Selectable)
Power Input	12VDC Only
Power Requirement	130mA / 350mA IR LED ON
Overall Camera Dimensions	3.76"(W) x 3.15"(H) (70mm x 80mm)
Housing / Color	Aluminum / White
Weight	.89 Lb.
Operating Temperature	-14°F ~ 122°F
Weatherproof Rating	IP66

## 4-in-1, 1080p Outdoor IR Eyeball Cameras DWDR, True D/N, Semi-Auto 2.8~12mm IR Lens, 90' IR Range

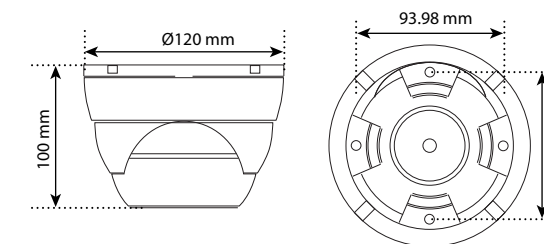
### FEATURES:

- ◆ Multi Format (TVI, CVI, AHD, 960H)
- ◆ Semi-Autofocus 2.8 ~ 12mm Lens
- ◆ Full HD 1080p Resolution
- ◆ 24 IR LED's / 90' IR Range
- ◆ True Day/Night Mechanical IR Cut Filter
- ◆ Digital Wide Dynamic Range
- ◆ Sense-up / Slow Shutter Speed
- ◆ UTC & Joystick Controllable OSD
- ◆ 12 Volt DC Power
- ◆ 3D Digital Noise Reduction
- ◆ 1/2.9" Sony CMOS Sensor
- ◆ IP66 Weatherproof

### INCLUDED ACCESSORIES:

User Manual, Mounting Screws.

### CAMERA OVERVIEW:



Side View / Bottom View & Mounting Configuration




In-Line Cable Mounted OSD Control




SPECIFICATION	HDMEIR90	HDMEIR90W
Image Sensor	1/2.9" CMOS Sensor	
Total Pixels	1984 x 1225	
Active Pixels	1920 x 1080	
Resolution	1920 x 1080 (1080p)	
Scanning System	Progressive Scan	
OSD (On Screen Display)	Dual OSD Access: Cable OSD Controlled / UTC Controlled (coaxial control)	
Digital WDR (Wide Dynamic Range)	TDN Semi Auto-Focus 2.8 ~ 12mm Lens / 28° ~ 90°	
DNR (Digital Noise Reduction)	Off / Auto (x2 ~ x30 Selectable)	
Video Output	Auto, FLK, 1/30 ~ 1/50,000, x2 ~ x30	
Lens Type - True Day Night	Built in Mechanical	
Sense-up	Color 0.1 Lux, B/W 0.05 Lux, IR LED ON 0.0 Lux	
Shutter Speed	24 IR LED's / 90' Range / 850nm	
IR Cut Filter	More than 52dB	
Minimum Illumination	0 ~15 Adjustable	
IR LED Count / Range	Internal	
S/N Ratio	y = 0.45 typ	
Automatic Gain Control	AWB / ATW / AWC->Set / Indoor / Outdoor / Manual	
Sync System	Off / BLC / HSBLC	
Gamma Characteristics	On / Off	
White Balance	EXT / Auto / Color / B/W	
Back Light Compensation	Mirror / V-Flip / Rotate / Off	
HBLC (High Back Light Compensation)	English, French, Spanish, German, Italian	
Day/Night	(see OSD Menu for more)	
Mirror	0 ~100 Adjustable	
Languages	On/Off (4 Zone Selectable)	
Brightness	On/Off (4 Zone Selectable)	
Motion Detection	12VDC Only	
Privacy Mask	150mA / 430 mA IR LED ON	
Power Input	4.72" x 3.93" (120mm x 100mm)	
Power Requirement	180mA / 550mA IR LED ON	
Overall Camera Dimensions	4.7" x 3.4" (120mm x 88mm)	
Housing / Color	Gray	White
Weight	1.7lb	
Operating Temperature	-14°F ~ 122°F	
Weatherproof Rating	IP66	

Note: Specification subject to change without notice

### OPTIONAL MOUNTING ACCESSORIES:

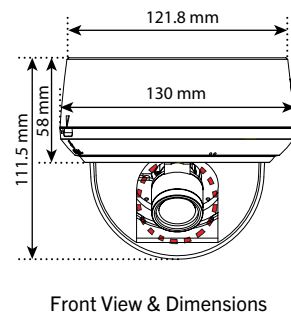
DWMVFBB - Gray Back Box 

DWMVFBBW - White Back Box 

## 4-in-1, 1080p Outdoor Varifocal IR Dome Camera True WDR, 2.8~12mm Autofocus IR Lens, 90' IR Range

### FEATURES:

- ◆ Multi Format (TVI, CVI, AHD, 960H)
- ◆ True 120dB Wide Dynamic Range
- ◆ True Day/Night Mechanical IR Cut Filter
- ◆ 2.8~12mm Autofocus IR Lens
- ◆ 15 IR LED's / 90' IR Range
- ◆ UTC & Joystick Controllable OSD
- ◆ 3D Digital Noise Reduction
- ◆ 12VDC/24VAC Dual Voltage Power
- ◆ 3-Axis Wall or Ceiling Mountable
- ◆ IP67 Weatherproof, IK10 Impact Ratings



Front View & Dimensions

SPECIFICATION	HDAFDIR90WD
Image Sensor	1/2.8" CMOS Sensor
Total Pixels	1984 x 1225
Active Pixels	1920 x 1080
Resolution	1920 x 1080 (1080p)
Scanning System	Progressive Scan
OSD (On Screen Display)	Dual OSD Access: Cable OSD Controlled / UTC Controlled (coaxial control)
True WDR (Wide Dynamic Range)	Yes- 120dB
DNR (Digital Noise Reduction)	3D DNR - Auto, Manual (0~30), Off
Video Output	TVI, CVI, AHD & 960H (Selectable via OSD Cable)
Lens Type / Viewing Angle	2.8~12mm IR Lens - H: 35° - 105°
Shutter Speed	Auto, Manual 1/25 ~ 1/10,000
IR Cut Filter	Built in Mechanical
Minimum Illumination	Color 0.001 Lux, B/W 0.0 Lux, IR LED ON
IR LED Count / Range	15 IR LED's / 90' Range / 850nm
S/N Ratio	More than 50dB
Automatic Gain Control	Auto, Manual 0 ~16 Adjustable
Sync System	Internal
Gamma Characteristics	$\gamma = 0.45$ typ
White Balance	ATW, MWB - R & B Gain 0~32 Adjustable
Back Light Compensation	Globe / BLC / 1~8 Adjustable
Day/Night	EXT / Auto / Color / B/W
Languages	English, French, Spanish, German, Italian (see OSD Menu for more)
Brightness	0 ~30 Adjustable
Power Input	12VDC/24VAC Dual Voltage Power
Power Requirement	180mA / 290 mA IR LED ON
Overall Camera Dimensions	5.1" x 4.4" (ø 130 x 112mm)
Housing / Color	Plastic / White
Weight	1.6lb / 725g
Operating Temperature	-14°F ~ 131°F
Weatherproof / Impact Rating	IP67/IK10

### INCLUDED ACCESSORIES:

Camera, User Manual, Mounting Screws.

### OPTIONAL MOUNTING ACCESSORIES:

**N2JB5** - Junction Box



**N2PC5** - Pendent Cap



**N2CPM1** - Pendent Mount  
(Requires N2PC5)



**N2HWM1** - Wall Mount  
(Requires N2PC5)



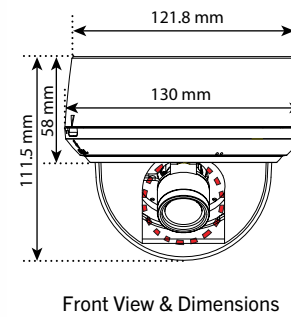
**N2POLEMT2** - Pole Mount  
(Requires N2PC5 & N2HWM1)



## 4-in-1, 1080p Indoor Varifocal IR Dome Camera True WDR, 2.8~12mm Autofocus IR Lens, 90' IR Range

### FEATURES:

- ◆ Multi Format (TVI, CVI, AHD, 960H)
- ◆ True 120dB Wide Dynamic Range
- ◆ True Day/Night Mechanical IR Cut Filter
- ◆ 2.8~12mm Autofocus IR Lens
- ◆ 15 IR LED's / 90' IR Range
- ◆ UTC & Joystick Controllable OSD
- ◆ 3D Digital Noise Reduction
- ◆ 12VDC/24VAC Dual Voltage Power
- ◆ 3-Axis Wall or Ceiling Mountable
- ◆ Indoor Only



Front View & Dimensions

SPECIFICATION	HDAFDIR90INWD
Image Sensor	1/2.8" CMOS Sensor
Total Pixels	1984 x 1225
Active Pixels	1920 x 1080
Resolution	1920 x 1080 (1080p)
Scanning System	Progressive Scan
OSD (On Screen Display)	Dual OSD Access: Cable OSD Controlled / UTC Controlled (coaxial control)
True WDR (Wide Dynamic Range)	Yes- 120dB
DNR (Digital Noise Reduction)	3D DNR - Auto, Manual (0~30), Off
Video Output	TVI, CVI, AHD & 960H (Selectable via OSD Cable)
Lens Type / Viewing Angle	2.8~12mm IR Lens - H: 35° - 105°
Shutter Speed	Auto, Manual 1/25 ~ 1/10,000
IR Cut Filter	Built in Mechanical
Minimum Illumination	Color 0.001 Lux, B/W 0.0 Lux, IR LED ON
IR LED Count / Range	15 IR LED's / 90' Range / 850nm
S/N Ratio	More than 50dB
Automatic Gain Control	Auto, Manual 0 ~16 Adjustable
Sync System	Internal
Gamma Characteristics	$\gamma = 0.45$ typ
White Balance	ATW, MWB - R & B Gain 0~32 Adjustable
Back Light Compensation	Globe / BLC / 1~8 Adjustable
Day/Night	EXT / Auto / Color / B/W
Languages	English, French, Spanish, German, Italian (see OSD Menu for more)
Brightness	0 ~30 Adjustable
Power Input	12VDC/24VAC Dual Voltage Power
Power Requirement	180mA / 290 mA IR LED ON
Overall Camera Dimensions	5.1" x 4.4" (ø 130 x 112mm)
Housing / Color	Plastic / White
Weight	1.0lb / 454g
Operating Temperature	14°F ~ 131°F
Weatherproof Rating	Indoor Only

Note: Specification subject to change without notice

### INCLUDED ACCESSORIES:

Camera, User Manual, Mounting Screws.

### OPTIONAL MOUNTING ACCESSORIES:

**N2JB5** - Junction Box



**N2PC5** - Pendent Cap



**N2CPM1** - Pendent Mount  
(Requires N2PC5)



**N2HWM1** - Wall Mount  
(Requires N2PC5)



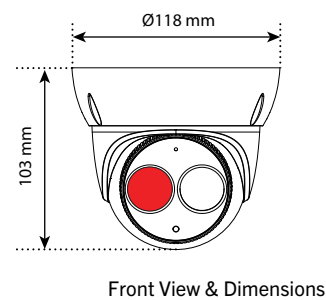
**N2POLEMT2** - Pole Mount  
(Requires N2PC5 & N2HWM1)



## 4-in-1, 1080p Outdoor IR Turret Camera True WDR, 2.8mm IR Lens, 90' IR Range

### FEATURES:

- ◆ Multi Format (TVI, CVI, AHD, 960H)
- ◆ True 120dB Wide Dynamic Range
- ◆ True Day/Night Mechanical IR Cut Filter
- ◆ 2.8mm Fixed Focal IR Lens
- ◆ 1 High Power IR LED / 90' IR Range
- ◆ UTC & Joystick Controllable OSD
- ◆ 3D Digital Noise Reduction
- ◆ 12 Volt DC Power
- ◆ IP67 Weatherproof



### INCLUDED ACCESSORIES:

Quick Guide, Mounting Template, Hardware Packet, Adjustment Wrench, Waterproof Connector.

### OPTIONAL MOUNTING ACCESSORIES:

**N2JB3** - Junction Box



**N2PC3** - Pendent Cap



**N2CPM1** - Pendent Mount  
(Requires N2PC3)



**N2HWM1** - Wall Mount  
(Requires N2PC3)



**N2POLEMT2** - Pole Mount  
(Requires N2PC3 & N2HWM1)

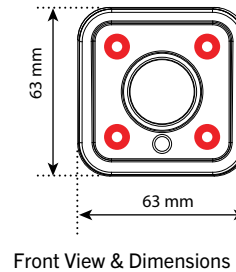


SPECIFICATION	HDTIR90WD
Image Sensor	1/2.8" CMOS Sensor
Total Pixels	1984 x 1225
Active Pixels	1920 x 1080
Resolution	1920 x 1080 (1080p)
Scanning System	Progressive Scan
OSD (On Screen Display)	Dual OSD Access: Cable OSD Controlled / UTC Controlled (coaxial control)
True WDR (Wide Dynamic Range)	Yes- 120dB
DNR (Digital Noise Reduction)	3D DNR - Auto, Manual (0~30), Off
Video Output	TVI, CVI, AHD & 960H (Selectable via OSD Cable)
Lens Type / Viewing Angle	2.8mm IR Lens - H: 108.9° V: 58.8°
Shutter Speed	Auto, Manual 1/25 ~ 1/10,000
IR Cut Filter	Built in Mechanical
Minimum Illumination	Color 0.001 Lux, B/W 0.0 Lux, IR LED ON
IR LED Count / Range	1 High Power IR LED / 90' Range / 850nm
S/N Ratio	More than 50dB
Automatic Gain Control	Auto, Manual 0 ~16 Adjustable
Sync System	Internal
Gamma Characteristics	$\gamma = 0.45$ typ
White Balance	ATW, MWB - R & B Gain 0~32 Adjustable
Back Light Compensation	Globe / BLC / 1~8 Adjustable
Day/Night	EXT / Auto / Color / B/W
Languages	English, French, Spanish, German, Italian (see OSD Menu for more)
Brightness	0 ~30 Adjustable
Power Input	12VDC Only
Power Requirement	120mA /250 mA IR LED ON
Overall Camera Dimensions	4.6" x 4.1" (118 x 103mm)
Housing / Color	Aluminum / White
Weight	1.2lb / 550g
Operating Temperature	-14°F ~ 131°F
Weatherproof Rating	IP67

## 4-in-1, 1080p Outdoor IR Bullet Camera True WDR, 2.8mm IR Lens, 60' IR Range

### FEATURES:

- ◆ Multi Format (TVI, CVI, AHD, 960H)
- ◆ True 120dB Wide Dynamic Range
- ◆ True Day/Night Mechanical IR Cut Filter
- ◆ 2.8mm Fixed Focal IR Lens
- ◆ 24 IR LED's / 60' IR Range
- ◆ UTC & Joystick Controllable OSD
- ◆ 3D Digital Noise Reduction
- ◆ 12 Volt DC Power
- ◆ IP67 Weatherproof



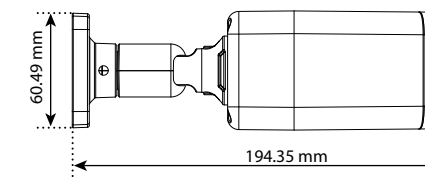
SPECIFICATION	HDBIR60WD
Image Sensor	1/2.8" CMOS Sensor
Total Pixels	1984 x 1225
Active Pixels	1920 x 1080
Resolution	1920 x 1080 (1080p)
Scanning System	Progressive Scan
OSD (On Screen Display)	Dual OSD Access: Cable OSD Controlled / UTC Controlled (coaxial control)
True WDR (Wide Dynamic Range)	Yes- 120dB
DNR (Digital Noise Reduction)	3D DNR - Auto, Manual (0~30), Off
Video Output	"TVI, CVI, AHD & 960H (Selectable via OSD Cable)"
Lens Type / Viewing Angle	2.8mm IR Lens - H: 108.9° V: 58.8°
Shutter Speed	Auto, Manual 1/25 ~ 1/10,000
IR Cut Filter	Built in Mechanical
Minimum Illumination	Color 0.001 Lux, B/W 0.0 Lux, IR LED ON
IR LED Count / Range	24 IR LED's / 60' Range / 850nm
S/N Ratio	More than 50dB
Automatic Gain Control	Auto, Manual 0 ~16 Adjustable
Sync System	Internal
Gamma Characteristics	$\gamma = 0.45$ typ
White Balance	ATW, MWB - R & B Gain 0~32 Adjustable
Back Light Compensation	Globe / BLC / 1~8 Adjustable
Day/Night	EXT / Auto / Color / B/W
Languages	English, French, Spanish, German, Italian (see OSD Menu for more)
Brightness	0 ~30 Adjustable
Power Input	12VDC Only
Power Requirement	110mA /390 mA IR LED ON
Overall Camera Dimensions	7.7" x 2.5" (195mm x 63mm)
Housing / Color	Aluminum / White
Weight	1.08lb / 490g
Operating Temperature	-14°F ~ 131°F
Weatherproof Rating	IP67

Note: Specification subject to change without notice

### INCLUDED ACCESSORIES:

Camera, User Manual, Mounting Screws.

### CAMERA OVERVIEW:



### OPTIONAL MOUNTING ACCESSORIES:

**N2JB1** - Junction Box



**N2POLEMT2** - Pole Mount



## 4-in-1, 1080p Outdoor Varifocal IR Bullet Camera True WDR, 2.8~12mm Autofocus IR Lens, 120' IR Range

### FEATURES:

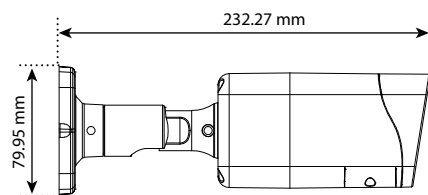
- ◆ Multi Format (TVI, CVI, AHD, 960H)
- ◆ True 120dB Wide Dynamic Range
- ◆ True Day/Night Mechanical IR Cut Filter
- ◆ 2.8~12mm Autofocus IR Lens
- ◆ 30 IR LED's / 120' IR Range
- ◆ UTC & Joystick Controllable OSD
- ◆ 3D Digital Noise Reduction
- ◆ 12VDC/24VAC Dual Voltage Power
- ◆ 3-Axis Cable Management Mount
- ◆ IP67 Weatherproof



### INCLUDED ACCESSORIES:

User Manual, Mounting Hardware Packet, Mounting Template.

### CAMERA OVERVIEW:



### OPTIONAL MOUNTING ACCESSORIES:

N2JB1 - Junction Box



N2POLEMT2 - Pole Mount



SPECIFICATION	HDAFBIR120WD
Image Sensor	1/2.8" CMOS Sensor
Total Pixels	1984 x 1225
Active Pixels	1920 x 1080
Resolution	1920 x 1080 (1080p)
Scanning System	Progressive Scan
OSD (On Screen Display)	Dual OSD Access: Cable OSD Controlled / UTC Controlled (coaxial control)
True WDR (Wide Dynamic Range)	Yes- 120dB
DNR (Digital Noise Reduction)	3D DNR - Auto, Manual (0~30), Off
Video Output	TVI, CVI, AHD & 960H (Selectable via OSD Cable)
Lens Type / Viewing Angle	2.8~12mm IR Lens - H: 35° - 105°
Shutter Speed	Auto, Manual 1/25 ~ 1/10,000
IR Cut Filter	Built in Mechanical
Minimum Illumination	Color 0.001 Lux, B/W 0.0 Lux, IR LED ON
IR LED Count / Range	30 IR LED's / 120' Range / 850nm
S/N Ratio	More than 50dB
Automatic Gain Control	Auto, Manual 0 ~16 Adjustable
Sync System	Internal
Gamma Characteristics	y = 0.45 typ
White Balance	ATW, MWB - R & B Gain 0~32 Adjustable
Back Light Compensation	Globe / BLC / 1~8 Adjustable
Day/Night	EXT / Auto / Color / B/W
Languages	English, French, Spanish, German, Italian (see OSD Menu for more)
Brightness	0 ~30 Adjustable
Power Input	12VDC/24VAC Dual Voltage Power
Power Requirement	160mA /550 mA IR LED ON
Overall Camera Dimensions	9.1" x 3.0" x 3.2 (232 x 75 x 80mm)
Housing / Color	Aluminum / White
Weight	1.43lb / 650g
Operating Temperature	-14°F ~ 131°F
Weatherproof Rating	IP67

## 4-in-1, 1080p Outdoor IR Bullet Camera DWDR, True D/N, 3.6mm IR Lens, 60' IR Range

### FEATURES:

- ◆ Multi Format (TVI, CVI, AHD, 960H)
- ◆ Full HD 1080p Resolution
- ◆ 18 IR LED's / 60' IR Range
- ◆ True Day/Night Mechanical IR Cut Filter
- ◆ Digital Wide Dynamic Range
- ◆ Cable Management Mount
- ◆ Sense-up / Slow Shutter Speed
- ◆ UTC & Joystick Controllable OSD
- ◆ 12 Volt DC Power
- ◆ 3D Digital Noise Reduction
- ◆ 1/2.9" Sony CMOS Sensor
- ◆ 3.6mm Fixed Focal Lens
- ◆ IP66 Weatherproof



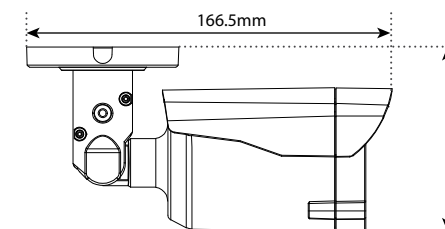
SPECIFICATION	HDBIR60
Image Sensor	1/2.9" CMOS Sensor
Total Pixels	1984 x 1225
Active Pixels	1920 x 1080
Resolution	1920 x 1080 (1080p)
Scanning System	Progressive Scan
OSD (On Screen Display)	Dual OSD Access: Cable Mounted Joystick Controlled / UTC Controlled (coaxial control)
Digital WDR (Wide Dynamic Range)	Auto / Off / On - 0 ~ 8 Adjustable
DNR (Digital Noise Reduction)	2D & 3D, Low, Middle, High, Off
Video Output	TVI, CVI, AHD & 960H (Selectable via OSD Joystick)
Lens Type - True Day Night	3.6mm Fixed Lens
Sense-up	Off / Auto (x2 ~ x30 Selectable)
Shutter Speed	Auto, FLK, 1/30 ~ 1/50,000, x2 ~ x30
IR Cut Filter	Built in Mechanical
Minimum Illumination	Color 0.1 Lux, B/W 0.05 Lux, IR LED ON 0.0 Lux
IR LED Count / Range	18 IR LED's / 60' Range / 850nm
S/N Ratio	More than 52dB
Automatic Gain Control	0 ~15 Adjustable
Sync System	Internal
Gamma Characteristics	y = 0.45 typ
White Balance	AWB / ATW / AWC->Set / Indoor / Outdoor / Manual
Back Light Compensation	Off / BLC / HSBLC
HBLC (High Back Light Compensation)	On / Off
Day/Night	EXT / Auto / Color / B/W
Mirror	Mirror / V-Flip / Rotate / Of
Languages	English, French, Spanish, German, Italian (see OSD Menu for more)
Brightness	0 ~100 Adjustable
Motion Detection	On/Off (4 Zone Selectable)
Privacy Mask	On/Off (4 Zone Selectable)
Power Input	12VDC Only
Power Requirement	150mA/550mA IR LED ON
Overall Camera Dimensions	6.6" x 2.7" x 3.3" (167mm x 70mm x 84mm)
Housing / Color	Aluminum - White
Weight	1.1lb
Operating Temperature	-14°F ~ 122°F
Weatherproof Rating	IP66

Note: Specification subject to change without notice

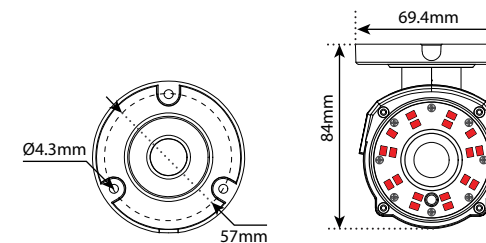
### INCLUDED ACCESSORIES:

User Manual, Mounting Screws, Camera Bracket

### CAMERA OVERVIEW:



Side View / Front View & Mounting Configuration





## 4-in-1, 1080p Outdoor Varifocal IR Bullet Camera DWDR, True D/N, 2.8~12mm IR Lens, 120' IR Range

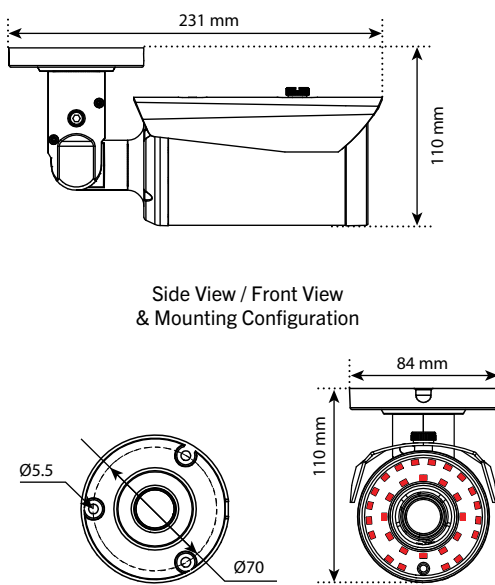
### FEATURES:

- ◆ Multi Format (TVI, CVI, AHD, 960H)
- ◆ Full HD 1080p Resolution
- ◆ 30 IR LED's / 120' IR Range
- ◆ True Day/Night Mechanical IR Cut Filter
- ◆ Digital Wide Dynamic Range
- ◆ Cable Management Mount
- ◆ Sense-up / Slow Shutter Speed
- ◆ UTC & Joystick Controllable OSD
- ◆ 12 Volt DC Power
- ◆ 3D Digital Noise Reduction
- ◆ 1/2.9" Sony CMOS Sensor
- ◆ 2.8 ~ 12mm Varifocal Lens
- ◆ IP66 Weatherproof

### INCLUDED ACCESSORIES:

User Manual, Mounting Screws, Camera Bracket

### CAMERA OVERVIEW:



SPECIFICATION	HDBVFIR120
Image Sensor	1/2.9" CMOS Sensor
Total Pixels	1984 x 1225
Active Pixels	1920 x 1080
Resolution	1920 x 1080 (1080p)
Scanning System	Progressive Scan
OSD (On Screen Display)	Dual OSD Access: Cable Mounted Joystick Controlled / UTC Controlled (coaxial control)
Digital WDR (Wide Dynamic Range)	Auto / Off / On - 0 ~ 8 Adjustable
DNR (Digital Noise Reduction)	2D & 3D, Low, Middle, High, Off
Video Output	TVI, CVI, AHD & 960H (Selectable via OSD Joystick)
Lens Type - True Day Night	2.8 ~ 12mm Varifocal Lens
Sense-up	Off / Auto (x2 ~ x30 Selectable)
Shutter Speed	Auto, FLK, 1/30 ~ 1/50,000, x2 ~ x30
IR Cut Filter	Built in Mechanical
Minimum Illumination	Color 0.1 Lux, B/W 0.05 Lux, IR LED ON 0.0 Lux
IR LED Count / Range	30 IR LED's / 120' Range / 850nm
S/N Ratio	More than 52dB
Automatic Gain Control	0 ~15 Adjustable
Sync System	Internal
Gamma Characteristics	$\gamma = 0.45$ typ
White Balance	AWB / ATW / AWC->Set / Indoor / Outdoor / Manual
Back Light Compensation	Off / BLC / HSBLC
HBLC (High Back Light Compensation)	On / Off
Day/Night	EXT / Auto / Color / B/W
Mirror	Mirror / V-Flip / Rotate / Of
Languages	English, French, Spanish, German, Italian (see OSD Menu for more)
Brightness	0 ~100 Adjustable
Motion Detection	On/Off (4 Zone Selectable)
Privacy Mask	On/Off (4 Zone Selectable)
Power Input	12VDC Only
Power Requirement	150mA / 550mA IR LED ON
Overall Camera Dimensions	9.1" x 3.3" x 4.3" (231mm x 84mm x 110mm)
Housing / Color	Aluminum - White
Weight	1.6lb
Operating Temperature	-14°F ~ 122°F
Weatherproof Rating	IP66

## 4-in-1, 1080p Outdoor IR Bullet Cameras DWDR, True D/N, Semi-Auto 2.8~12mm IR Lens, 120' IR Range

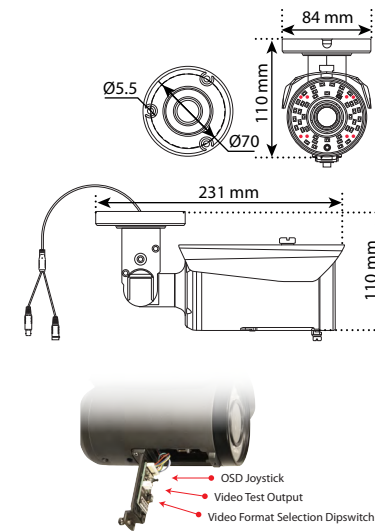
### FEATURES:

- ◆ Multi Format (TVI, CVI, AHD, 960H)
- ◆ Semi-Autofocus 2.8 ~ 12mm Lens
- ◆ Full HD 1080p Resolution
- ◆ 42 IR LED's / 120' IR Range
- ◆ Easy Access OSD Hatch
- ◆ Video Test Output & Cable
- ◆ True Day/Night Mechanical IR Cut Filter
- ◆ Digital Wide Dynamic Range
- ◆ Cable Management Mount
- ◆ Sense-up / Slow Shutter Speed
- ◆ UTC & Joystick Controllable OSD
- ◆ 12 Volt DC Power
- ◆ 3D Digital Noise Reduction
- ◆ 1/2.9" Sony CMOS Sensor
- ◆ IP66 Weatherproof

### INCLUDED ACCESSORIES:

User Manual, Video Test Cable, Adjustment Wrench, Mounting Screws.

### CAMERA OVERVIEW:



SPECIFICATION	HDMBIR120	HDMBIR120W
Image Sensor	1/2.9" CMOS Sensor	
Total Pixels	1984 x 1225	
Active Pixels	1920 x 1080	
Resolution	1920 x 1080 (1080p)	
Scanning System	Progressive Scan	
OSD (On Screen Display)	Dual OSD Access: Cable Mounted Joystick Controlled / UTC Controlled (coaxial control)	
Digital WDR (Wide Dynamic Range)	Auto / Off / On - 0 ~ 8 Adjustable	
DNR (Digital Noise Reduction)	2D & 3D, Low, Middle, High, Off	
Video Output	TVI, CVI, AHD & 960H (Selectable via Dipswitch)	
Lens Type / Viewing Angle	TDN Semi Auto-Focus 2.8 ~ 12mm Lens / 28° ~ 90°	
Sense-up	Off / Auto (x2 ~ x30 Selectable)	
Shutter Speed	Auto, FLK, 1/30 ~ 1/50,000, x2 ~ x30	
IR Cut Filter	Built in Mechanical	
Minimum Illumination	Color 0.1 Lux, B/W 0.05 Lux, IR LED ON 0.0 Lux	
IR LED Count / Range	42 IR LED's / 120' Range / 850nm	
S/N Ratio	More than 52dB	
Automatic Gain Control	0 ~15 Adjustable	
Sync System	Internal	
Gamma Characteristics	$\gamma = 0.45$ typ	
White Balance	AWB / ATW / AWC->Set / Indoor / Outdoor / Manual	
Back Light Compensation	Off / BLC / HSBLC	
HBLC (High Back Light Compensation)	On / Off	
Day/Night	EXT / Auto / Color / B/W	
Mirror	Mirror / V-Flip / Rotate / Off	
Languages	English, French, Spanish, German, Italian (see OSD Menu for more)	
Brightness	0 ~100 Adjustable	
Motion Detection	On/Off (4 Zone Selectable)	
Privacy Mask	On/Off (4 Zone Selectable)	
Power Input	12VDC Only	
Power Requirement	150mA / 600mA IR LED ON	
Overall Camera Dimensions	9.1" x 3.3" x 4.3" (231mm x 84mm x 110mm)	
Housing / Color	Gray	White
Weight	1.6lb	
Operating Temperature	-14°F ~ 122°F	
Weatherproof Rating	IP66	

Note: Specification subject to change without notice

## 4-in-1 1080p Outdoor IR License Plate Capture Camera DWDR, True D/N, Motorized 9~22mm IR Lens, 50' IR Range

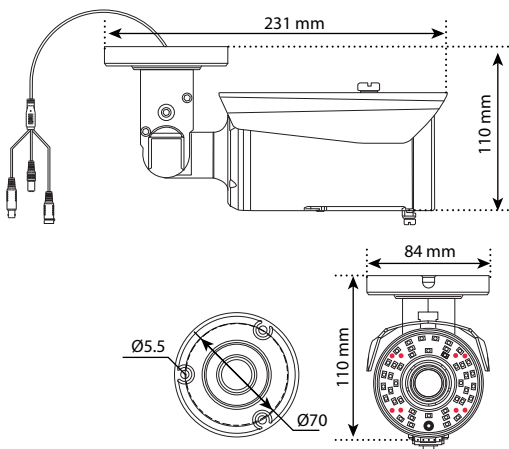
### FEATURES:

- ◆ Multi Format (TVI, CVI, AHD, 960H)
- ◆ Full HD 1080p Resolution
- ◆ Motorized 9~22mm Auto Iris IR Lens
- ◆ 42 IR LED's
- ◆ 50' Plate Capture Range
- ◆ 44 MPH Plate Capture Speed
- ◆ Digital Wide Dynamic Range
- ◆ True Day/Night Mechanical IR Cut Filter
- ◆ UTC Controllable OSD & Joystick
- ◆ Sense-up / Slow Shutter Speed
- ◆ 12VDC/24VAC Dual Voltage Power
- ◆ 3D Digital Noise Reduction
- ◆ 1/2.9" Sony CMOS Sensor
- ◆ 3-Axis Cable Management Mount
- ◆ IP66 Weatherproof

### INCLUDED ACCESSORIES:

User Manual, Mounting Hardware Packet, L-Style Wrench, Mounting Template.

### CAMERA OVERVIEW:



Front View & Mounting Configuration



In-Line Cable Mounted OSD Control



HDLPCAM

SPECIFICATION	HDLPCAM
Image Sensor	1/2.9" Sony CMOS Sensor
Total Pixels	1984 x 1225
Active Pixels	1920 x 1080
Resolution	1920 x 1080 (1080p)
Scanning System	Progressive Scan
OSD (On Screen Display)	Dual OSD Access: Cable Mounted Joystick Controlled / UTC Controlled (coaxial control)
Digital WDR (Wide Dynamic Range)	Auto / Off / On (0 ~8 Adjustable)
DNR (Digital Noise Reduction)	2D & 3D (Off / Low / Middle / High)
Video Output	BNC Video Connector
Lens Type - True Day Night	Motorized 9 ~ 22mm Varifocal Auto Iris IR Lens
Sense-up	Off / x2 ~ x30
Shutter Speed	Auto, FLK, 1/30 ~ 1/50,000, x2 ~ x30
IR Cut Filter	Built in Mechanical
Minimum Illumination	0.0 Lux IR LED On
IR LED Count / Range	42 IR LED's / 50' Range / 850nm
Plate Capture Viewing Angle	14° ~ 32° Vertical / 8° ~ 35° Horizontal
Plate Capture Speed	44 MPH
Plate Capture Range	Up to 50'
S/N Ratio	More than 52dB
Automatic Gain Control	0 ~15 Adjustable
Sync System	Internal
Gamma Characteristics	$\gamma = 0.45$ typ.
White Balance	ATW / AWC->Set / Indoor / Outdoor / Manual
Back Light Compensation	Off / BLC / HSBL
HBLC (High Back Light Compensation)	On / Off 4-Zone, Level & Mode Adjustable
Day/Night	EXT / Auto / Color / B/W
Mirror	Mirror / V-Flip / Rotate / Off
Languages	English, French, Spanish, German, Italian (see OSD Menu for more)
Brightness	0 ~ 100 Adjustable
Motion Detection	On/Off (4 Zone Selectable)
Privacy Mask	On/Off (4 Zone Selectable)
Power Input	12VDC/24VAC +/- 10% Dual Voltage Power
Power Requirement	400mA / 900mA IR LED ON
Overall Camera Dimensions	9.1" x 3.3" x 4.3" (231mm x 84mm x 110mm)
Housing / Color	Aluminum - White
Weight	1.6 Lb.
Operating Temperature	-22°F ~ 122°F
Weatherproof Rating	IP66

## 4-in-1, 5MP, True WDR Box Camera True D/N, UTC, 3DNR - Lens Sold Separately

### FEATURES:

- ◆ Up to 5MP Resolution (TVI/AHD)
- ◆ Multi Format (TVI, CVI, AHD, 960H)
- ◆ True 120dB Wide Dynamic Range
- ◆ True D/N Mechanical IR Cut Filter
- ◆ 12VDC/24VAC Dual Voltage Power
- ◆ Accepts C/CS Lenses (Lens Sold Separately)
- ◆ Joystick & UTC Controllable OSD
- ◆ Adjustable Shutter Speed
- ◆ 3D Digital Noise Reduction
- ◆ Top & Bottom Mounting Holes
- ◆ Adjustable Back Focus
- ◆ Indoor Only

### OPTIONAL ACCESSORIES:

Metal Dual Option Camera Mounts

**MCM6W** - White Indoor Camera Mount with Wall/Ceiling & T-Bar Mount



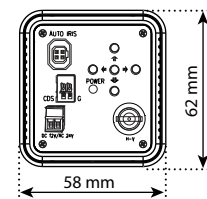
MCM6W - T-Bar Mount

MCM6W

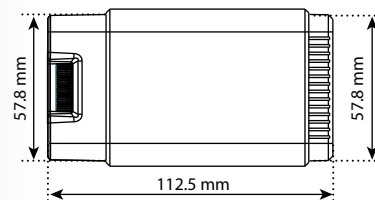
**VF2812IRMP5** - 5MP, 2.8~12mm CS Mount, DC Driven IR Lens with Full Glass Elements



VF2812IRMP5



Dimensions / Side & Rear View



HDBXWDR

SPECIFICATION	HDBXWDR
Image Sensor	1/2.8" Sony CMOS
Active Pixels	2688(H)x1944(V)
Resolution	Up to 5 Megapixel (5MP TVI/AHD), 4MP&2MP (TVI/AND/CVI), 960H
Resolution Default	TVI 1080p
Scanning System	Progressive Scan
OSD (On Screen Display)	Back Panel Joystick / UTC Controlled (coaxial control)
True WDR (Wide Dynamic Range)	120dB
3D Digital Noise Reduction	Yes (OFF / LOW / MIDDLE / HIGH)
Video Output	TVI, CVI, AHD & 960H (Selectable via OSD Menu)
Lens Type	Accepts C/CS Mount (CS Adapter Included)
Iris Type	DC Auto-Iris
Sense-up	Yes (x2 ~ x32 Adjustable) / OFF
Shutter Speed	Auto / FLK / Manual (1/30s ~ 1/30,000s)
IR Cut Filter	Yes - Built in Mechanical
Minimum Illumination	Color (0.03) / B&W (0.003 lux)
S/N Ratio	More than 52dB
Automatic Gain Control	Yes (0~10 Adjustable)
Sync System	Internal
White Balance	Yes AUTO / MANUAL (C-TEMP, R-GAIN / B-GAIN) Adjustable
Back Light Compensation	Yes ON/OFF (H/V Position & Size Adjustable)
HLC	Yes ON/OFF (Level & Color Adjustable)
Day/Night	Auto / COLOR / B&W / EXT / (D>N, N>D, Delay Adjustable)
Mirror	Yes
Digital Zoom	1x ~ 16X
Languages	ENG / CHN / CHN(S) / JPN / KOR
Brightness	Yes (1~20 Adjustable)
Motion Detection	Yes, 4-Zone Adjustable
Privacy Mask	Yes, 16-Zone Adjustable
Power Input	12 VDC±10%, 24 VAC±10%
Power Requirement	180mA
Overall Camera Dimensions	58x62x128mm (2.28"x2.44"x5.04")
Weight	Approx .85lb / 385g
Operating Temperature	-10°C ~ 60 °C (14°F ~ 140°F)
Weatherproof Rating	Indoor Only

Note: Specification subject to change without notice

## 4-in-1, 1080p, Outdoor IR PTZ Camera DWDR, True D/N, 33X IR Zoom Lens, 450' IR, IP66

### FEATURES:

- ◆ Multi-Format (TVI, CVI, AHD & 960H)
- ◆ 33X (4.6 ~ 152mm) Optical Zoom Level
- ◆ UTC & RS-485 Controllable
- ◆ Included 24VAC Power Supply
- ◆ Included Wall Mount
- ◆ 360° Endless Panning
- ◆ True D/N Mechanical IR Cut Filter
- ◆ 12 High Power IR LED's / 450' IR Range
- ◆ 4 Programmable Privacy Masks
- ◆ 128 Preset Positions
- ◆ 4 Tours - Up to 32 Presets Each
- ◆ -40°F Operating Temperature
- ◆ Built in Heater & Fan
- ◆ 1/2.8" 2MP CMOS Sensor
- ◆ IP66 Weatherproof

### INCLUDED ACCESSORIES:

Quick Setup Guide, User Manual,  
24VAC Power Adapter, Wall Mount Bracket,  
Mounting Hardware Kit & Tools.

### OPTIONAL MOUNTING ACCESSORIES:

**N2PTZPOLEMT** - PTZ Pole Mount \*

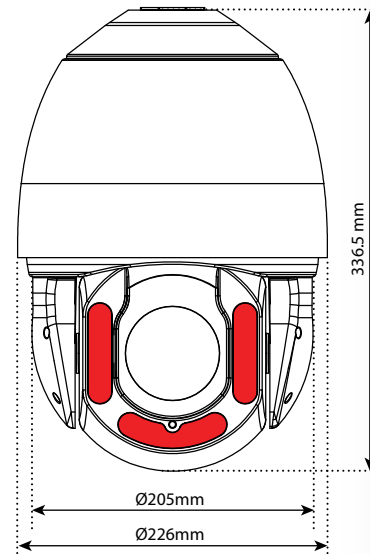
**N2PTZCRNMT** - PTZ Outside  
Corner Mount \*

**N2PTZPENDMT** - Pendant Mount

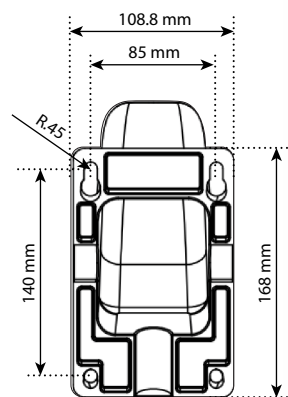
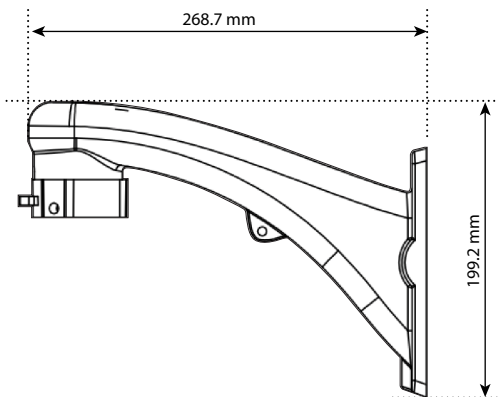
**N2PTZJB** - Junction Box



HDPTZ33X



### WALL MOUNT DIMENSIONS:



\* Pole & Corner Mount are compatible with  
HDPTZ33X wall mount & N2PTZJB

	SPECIFICATION	HDPTZ32XIR
Camera	Image Sensor	1/2.8" Progressive Scan CMOS
	Image Resolution	2 Megapixel, 1920(H) x 1080(V)
	Frame Rate	50Hz: 25fps (PAL) / 60Hz: 30fps (NTSC)
	Min. Illumination	Color: 0.001Lux @ (F1.2, AGC ON) B/W: 0Lux @ (IR LED ON)
	White Balance	Auto / ATW / AWC-Set / Indoor / Outdoor / Manual / AWB
	AGC	Auto ( 1 ~ 15 Adjustable)
	S/N Ratio	More than 52dB
	2D & 3D DNR	Auto / Off / Low / Middle / High
	Backlight Compensation	OFF / ON, (HLC Off / On also Available)
	D-WDR (Wide Dynamic Range)	Digital WDR
	Shutter Time	AUTO, 1/25, 1/50, FLK, 1/200, 1/400, 1/1000, 1/2000, 1/5000, 1/10000, 1/50000, X2, X4, X6, X8, X10, X15, X20, X25, X30
	True Day & Night	Yes - Mechanical IR Cut Filter
	Digital Zoom	Yes: 1 ~ 20X
	Privacy Mask	Yes: 4-Zone
Input / Output	Video Output	Single BNC Output for TVI, CVI, AHD & 960H / Dipswitch for Switching Formats
	RS-485 Interface	Yes
	UTC Function	Yes - Up the Coax Control Available
IR	IR LED / Distance / nm	12 IR LEDs / Up to 450' / 850nm
	IR Intensity	Proportional to Zoom Level
Lens	Focus Mode	Auto / Semi-Automatic / Manual
	Focal Length	4.6 ~ 152mm / 33X Optical Zoom
	Zoom Speed	Approx.6.2s (Optical Wide-Tele)
	Angle of View	Horizontal: 55.2° ~ 3.2°
	Min. Working Distance	11.8"
	Aperture	F1.6~F4.8 (Auto IRIS)
Pan & Tilt	Pan Range	0° ~ 360° Endless
	Pan Speed	0.1° ~ 200° / Second
	Tilt Range	0° ~ +90°
	Tilt Speed	0.1 ~ 180° / Second
	Proportional Zoom	Auto Adjusts Speed for Zoom Level
	Number of Preset	128
	Tour	4 Tour, Speed & Park Time of Presets Can be Set
	Pattern	355° Programmable, 4 scan
	Power-off Memory	Tour, Preset, Pattern & Scan Can be Set
	Park Action	Tour, Preset, Pattern & Scan Can be Set
General	Scheduled Task	Presets / Scan / Patterns / Patrol
	Menu Language	ENG / CHN 1 / CHN 2 / GER / FRA / ITA / SPA / POL / RUS / POR / NED / TUR
	Power	AC 24V / 2.5A (With the Heater On)
	Operating Temperature	-40 °C ~ 60 °C (-40°F ~ 140 °F)
	Protection Level	IP66
	Certification	CE / FCC
	Dimensions	226 x.336.5mm ( 8.9" x.13.25")
	Housing / Color	Metal / White
	Included	Wall Mount & 24VAC Power Supply
	Weight (approx.)	5Kg (11.02 lbs)

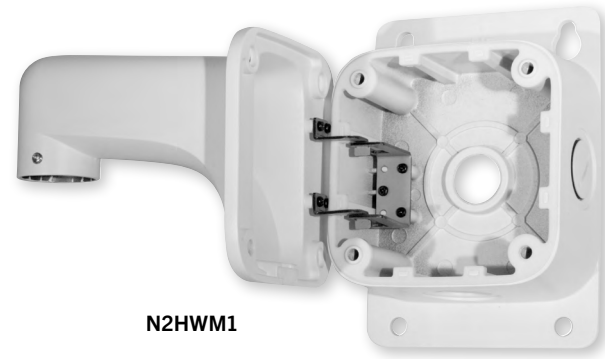
Note: Specification subject to change without notice

# N2 Series Mounting Accessories

## N2 Series Wall, Pendent & Pole Mounting Accessories for Select Northern Cameras

### N2HWM1 Hinged Wall Mount with Junction Box

- FEATURES:**
- ◆ Manages & Protects Cables
  - ◆ Hinged Wall Arm for Easy Installation
  - ◆ Side, Back & Bottom 3/4" Conduit Access
  - ◆ Requires Northern Pendent Caps:  
N2PC1, N2PC2, N2PC3, N2PC4, N2PC5



### N2CPM1 Drop Down Pendant Mount

- FEATURES:**
- ◆ Manages & Protect Cables
  - ◆ 18" Drop Down Length (2 x 9" Pipes)
  - ◆ Use With or Without Drop Down Pipes
  - ◆ Requires Northern Pendent Caps:  
N2PC1, N2PC2, N2PC3, N2PC4, N2PC5



### N2POLEMT2 Pole Mount for Hinged Wall Mount & N2 Junction Boxes

- FEATURES:**
- ◆ Metal Straps Included
  - ◆ For 5-6" Diameter Poles
  - ◆ For Use with Northern: N2HWM1 Wall Mount &  
N2JB1, N2JB2, N2JB3, N2JB4, N2JB5 Junction Boxes



# N2 Series Mounting Accessories

## N2 Series Pendent Caps Pendent Caps for Select Northern Cameras

- FEATURES:**
- ◆ Aluminum Construction
  - ◆ 1" Female Threads (G1 Thread)
  - ◆ Requires N2HWM1 (Wall Mount) or  
N2CPM1 (Pendant Mount)

N2PC1



N2PC2



N2PC3



N2PC4



N2PC5



### N2PC1 Pendent Cap

- ◆ For Use with Northern Camera Models:  
HDEIR60

### N2PC2 Pendent Cap

- ◆ For Use with Northern Camera Models:  
N2IP4DSD, N2IP4D4MMSD,  
N2IPKITCAMSD

### N2PC3 Pendent Cap

- ◆ For Use with Northern Camera Models:  
N2IP4TSD, HDTIR90WD

### N2PC4 Pendent Cap

- ◆ For Use with Northern Camera Models:  
N2IP4WSD

### N2PC5 Pendent Cap

- ◆ For Use with Northern Camera Models:  
N2IP4AFDSD, HDAFDIR90WD,  
HDAFDIR90INWD

Note: Specification subject to change without notice

# N2 Series Mounting Accessories

## N2 Series Junction Boxes

Junction Boxes for Select Northern Cameras

### FEATURES:

- ◆ Manages & Protects Cables
- ◆ 3/4" Conduit Access
- ◆ Compatible with N2POLEMT2 (Pole Mount)

### N2JB1

#### Junction Box

- ◆ For Use with Northern Camera Models: N2IP4BSD, N2IP4AFBSD, HDBIR60WD, HDAFBIR120WD, HDEIR60

### N2JB2

#### Junction Box

- ◆ For Use with Northern Camera Models: N2IP4DSD, N2IP4D4MMSD

### N2JB3

#### Junction Box

- ◆ For Use with Northern Camera Models: N2IP4TSD, HDTIR90WD, N2IPKITCAMSD

### N2JB4

#### Junction Box

- ◆ For Use with Northern Camera Models: N2IP4WSD

### N2JB5

#### Junction Box

- ◆ For Use with Northern Camera Models: N2IP4AFDSD, HDAFDIR90WD, HAFDIR90INWD



N2JB1



N2JB2



N2JB3



N2JB4



N2JB5

# N2 Series PTZ Mounting Accessories

## N2 Series PTZ Mounting Accessories

Mounting Accessories for Northern PTZ Models: N2IPPTZ30X & HDPTZ33X

### N2PTZJB

#### Hinged Junction Box

- ◆ Hinged Door for Easy Access
- ◆ Compatible with: N2IPPTZ30X & HDPTZ33X Wall Mount (Included with Camera) N2PTZCRNMT (Outside Corner Mount) N2PTZPOLEMT (Pole Mount)

N2PTZJB



### N2PTZCRNMT

#### Outside Corner Mount

- ◆ Compatible with: N2IPPTZ30X & HDPTZ33X Wall Mount (Included with Camera) N2PTZJB (Junction Box)

N2PTZCRNMT



### N2PTZPENDMT

#### Pendent Mount Bracket

- ◆ 9.5" Overall Length
- ◆ Compatible with: N2IPPTZ30X, HDPTZ33X

N2PTZPENDMT



### N2PTZPOLEMT

#### PTZ Pole Mount

- ◆ Metal Straps Included
- ◆ For Up to 7" Diameter Poles
- ◆ Compatible with: N2IPPTZ30X & HDPTZ33X Wall Mount (Included with Camera) N2PTZJB (Junction Box)

N2PTZPOLEMT



Note: Specification subject to change without notice

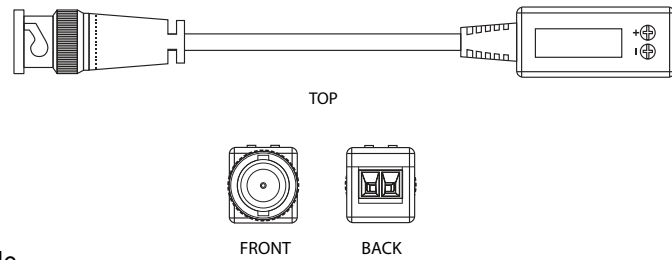
# VC3PAIRHD / VC4PAIRHD



## HD Balun for TVI, CVI, AHD & 960H Cameras BNC Male with 4" Mini Coax to Screw Terminal

### FEATURES:

- ◆ Transmission: 300M (720P & 960H), 250M (1080P)
- ◆ Compatible with TVI, CVI, AHD & 960H Formats
- ◆ 4" BNC Male Mini COAX to Screw Terminal for Easy Connection
- ◆ Compact & Mini Size, Eliminates the Need for Bulky Coaxial Cable
- ◆ Passive, No Power Required
- ◆ Built-in ESD, EFT & Transient Protection



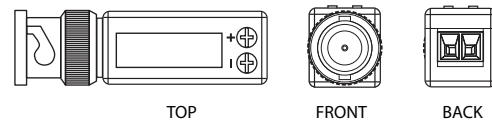
VC4PAIRHD

SPECIFICATION	VC4PAIRHD
Connections	Screw Terminal to BNC Male w/4" Mini Coax
Video Signal	1Vp-p, 75 Ohms
Bandwidth	50Hz ~ 60MHz (-3dB)
Transmission Distance	300M (720P & 960H), 250M (1080P)
ESD Protection	30KV (Air), 15KV (Contact); IEC 61000-4-2 Compliant
Cable Type	For Use with CAT5e/CAT6 UTP (Unshielded Twisted Pair)
EFT Protection	40A (5/50ns); IEC 61000-4-4 Compliant
Lightning Protection	2A (8/20µs); IEC 61000-4-5 Compliant
Surge Protection Attack Time	< 1nS
Dimensions	7.2" x 0.6" x 0.5" / 113mm x 16mm x 13mm
Weight	8 Oz

## HD Balun for TVI, CVI, AHD & 960H Cameras BNC Male to Screw Terminal

### FEATURES:

- ◆ Transmission: 300M (720P & 960H), 250M (1080P)
- ◆ Compatible with TVI, CVI, AHD & 960H Formats
- ◆ BNC Male to Screw Terminal for Easy Connection
- ◆ Compact & Mini Size, Eliminates the Need for Bulky Coaxial Cable
- ◆ Passive, No Power Required
- ◆ Built-in ESD, EFT & Transient Protection



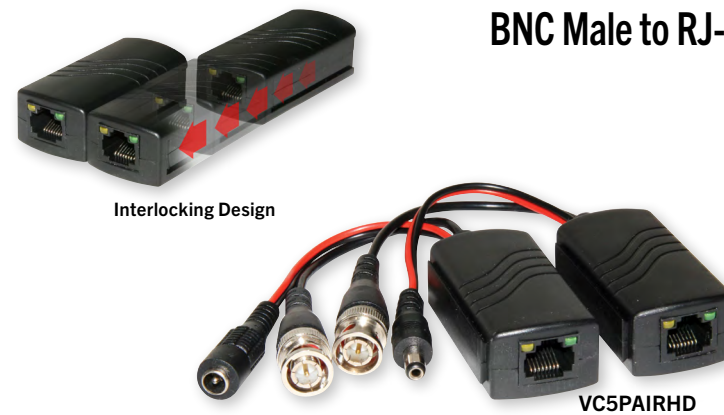
VC3PAIRHD

SPECIFICATION	VC3PAIRHD
Connections	Screw Terminal to BNC Male
Video Signal	1Vp-p, 75 Ohms
Bandwidth	50Hz ~ 60MHz (-3dB)
Transmission Distance	300M (720P & 960H), 250M (1080P)
ESD Protection	30KV (Air), 15KV (Contact); IEC 61000-4-2 Compliant
Cable Type	For Use with CAT5e/CAT6 UTP (Unshielded Twisted Pair)
EFT Protection	40A (5/50ns); IEC 61000-4-4 Compliant
Lightning Protection	2A (8/20µs); IEC 61000-4-5 Compliant
Surge Protection Attack Time	< 1nS
Dimensions	1.7" x 0.6" x 0.5" / 43mm x 16mm x 13mm
Weight	8 Oz



# VC5PAIRHD / HDGLC

## HD Video+Power Baluns for TVI, CVI, AHD & 960H Cameras BNC Male to RJ-45 Connector, 12VDC Male to 12VDC Female Power



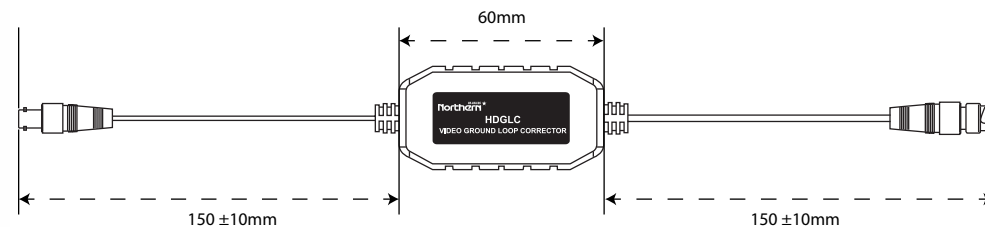
Interlocking Design

VC5PAIRHD

### FEATURES:

- ◆ Transmission: 300M (720p & 960H), 250M (1080p)
- ◆ Compatible with TVI, CVI, AHD & 960H Formats
- ◆ 6" BNC Male to RJ-45 Connector
- ◆ DC Male & DC Female Power Connections
- ◆ Built-in ESD, EFT & Transient Voltage Protection
- ◆ Interlocking Design

SPECIFICATION	VC5PAIRHD	DISTANCE / VOLTAGE REQUIREMENT			
		Desired Voltage / Amperage			
Connections	Video: RJ-45 to BNC Male Power: 12VDC Male to 12VDC Female	Distance	12VDC / 0.5A	12VDC / 1Amp	12VDC / 1.5A
Video Signal	1Vp-p, 75 Ohms		Starting Voltage Required		
Bandwidth	50Hz ~ 60MHz (-3dB)	50M	13.5V	15.5V	17.0V
Transmission Distance	Video: 300M (720p & 960H) 250M (1080p)		100M	15.5V	18.5V
ESD Protection	30KV (Air), 15KV (Contact); IEC 61000-4-2 Compliant	150M		17.0V	22.0V
Cable Type	For Use with CAT5e/CAT6 UTP Cable		200M	18.5V	25.5V
Power Type	Supports 12VDC & 24VAC Power	300M		22.0V	30.0V
EFT Protection	40A (5/50ns); IEC 61000-4-4 Compliant				
Lightning Protection	2A (8/20µs); IEC 61000-4-5 Compliant				
Surge Protection Attack Time	<1nS				
Dimensions	81mm x 20mm x 30mm (body) w/ 6" BNC & Power Pigtails				
Weight	0.2lb				



## HDGLC Video Ground Loop Corrector



HDGLC

Note: Specification subject to change without notice

SPECIFICATION	HDGLC
Compatible Formats	TVI, CVI, AHD, 960H
Insertion Loss	0.5dB
Frequency Response	0-3dB at 10Mhz
Connections	BNC male to BNC Female
Isolation Voltage	600VDC (Min.)
Insulation resistance	100M ohm
Transient Voltage Suppressors	12V rms
Dimensions (W/H/D)	2.2" x 1.1" x 0.8" (Body Only) w/ 8" Cables
Weight	1.7 oz.

### FEATURES:

- ◆ BNC Male to BNC Female Connections
- ◆ 12V rms Transient Voltage Suppressor
- ◆ 600VDC Isolation Voltage

## 4-in-1 HD Analog Real Time Quad / Switcher with Looping



Front Panel / Controls

### FEATURES

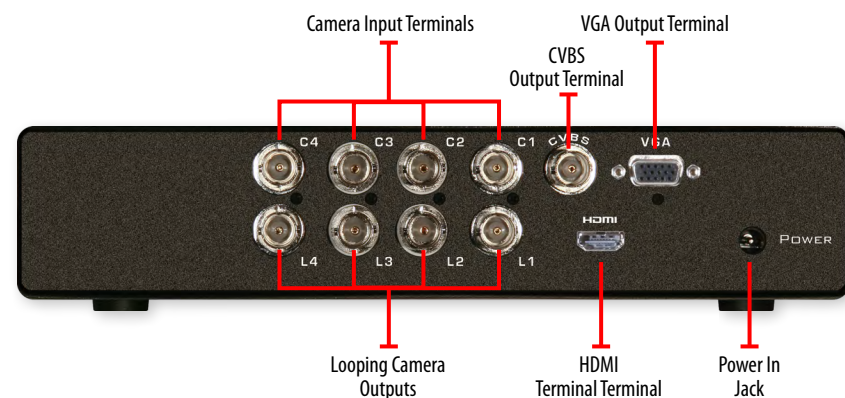
- ◆ Multi Format (TVI, CVI, AHD, 960H)
- ◆ HDMI, VGA & BNC Video Outputs
- ◆ 1080p Max Resolution
- ◆ 30FPS Real Time Viewing
- ◆ Looping BNC Video Inputs
- ◆ OSD Control of All Major Functions
- ◆ Time & Date Generator
- ◆ 8 Character Camera Title
- ◆ Adjustable Dwell Time
- ◆ Individual Camera Picture Adjustment
- ◆ NTSC/PAL Switchable
- ◆ LED Power Indicator
- ◆ Included 12VDC Power Supply
- ◆ Indoor Only

### INCLUDED / ACCESSORIES

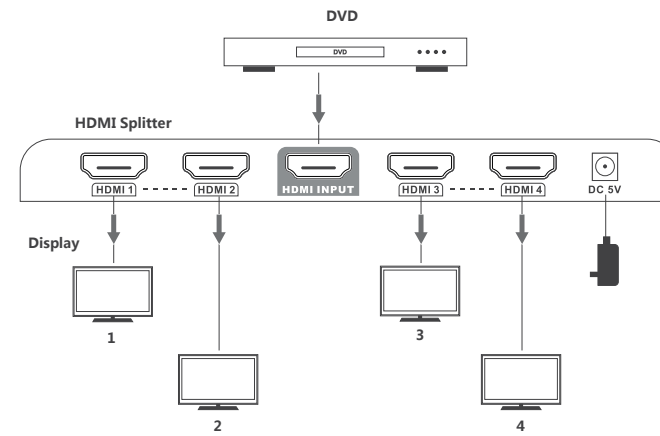
1. 500mA Power Supply
1. User Manual.

SPECIFICATION	HDQS4L
Video Format	TVI, CVI, AHD & 960H Compatible
Camera Inputs	BNC x 4, 1.0V p-p, 75 ohms
Camera Output	BNC x 4, 1.0V p-p, 75 ohms
Video Output	HDMI & VGA (1080p Max) / CVBS (640x480)
Simultaneous Output	Yes - Mirrored (HDMI, VGA, BNC)
Camera Adjustment	Independent Contrast, Brightness, Chroma & Tint Controls
Full Screen Viewing	Yes - 1 Button Easy Full Screen Viewing
Video Signal	NTSC/PAL Switchable
Certifications	FCC, ROHS
Power Supply	12 Volt DC, Included
Power Requirement	Max 5 Watts / 420mA
Weight	1.6lb
Dimensions	8.6" x 5.5" x 2" (W x D x H)
Weatherproof Rating	Indoor Only

Note: Specification subject to change without notice



## 4K UHD/60Hz HDMI 2.0 Splitter - 4 Channel Plug & Play - Indoor Only



### CONNECTION ILLUSTRATION:

1. Connect the HDMI video source output port to the splitter input port by HDMI cable.
2. Connect the splitter output port to HDMI display by HDMI cable.
3. Set the TV input to right HDMI channel.
4. Power on the splitter (Power indicator will light on).



HDMISPL14

### FEATURES:

- ◆ Send 1 HDMI Source to 4 HDMI Displays
- ◆ Up to 4K UHD @ 60Hz Resolution
- ◆ Supports HDMI 2.0 / HDCP 2.2
- ◆ Supports HDR-10
- ◆ Supports EDID
- ◆ Plug & Play Design
- ◆ 18 Gbps Transmission
- ◆ Includes Power Supply
- ◆ For Indoor Use Only

### INCLUDED ACCESSORIES:

5 Volt DC / 2AMP Power Supply, Users Manual

SPECIFICATION	HDMISPL14
Input Ports	HDMI x 1 (Type A, 19 pin, Female)
Output Ports	HDMI x 4 (Type A, 19 pin, Female)
Input / Output Cable Length	≤5M (AWG26 HDMI Cable, Supports HDMI 2.0)
Video Support	480i@60Hz, 480p@60Hz, 576i@50Hz, 576p@50Hz, 720p@50/60Hz, 1080i@50/60Hz, 1080p@50/60Hz, 4Kx2K@24/25/30/60Hz
Audio Support	Supports Standard Audio, DSD (Direct Stream Digital) & HD (HBR) Audio
HDMI Version	Supports HDMI 2.0, HDMI 1.4
HDCP Version	Supports HDCP 2.2, HDCP 1.4
HDR Version	Supports HDR-10
Video Format	Supports 12 bit Full HD Video, 3D Video & 4Kx2K 30/60Hz Ultra HD Video
Maximum Transmission Rate	18Gbps
TMDS Signal	0.5 1.5Vp-p (TMDS)
DCC Signal	5Vp-p (TTL)
EDID DIP Switch	Yes
Housing	Aluminum - Black
Dimensions (L x W x H)	158 x 80 x 17mm (6.2" x 3.2" x 0.7")
Weight	200g (0.45lb)
Power Input	5 Volt DC
Power Requirement	<8W
Operating Temperature	0 ~ 60°C (32° ~ 140°F)
Weatherproof Rating	Indoor Only
Certifications	FCC, CE, RoHS

Note: Specification subject to change without notice

## Security Rated Widescreen LED Monitors

### FEATURES:

- ◆ 18.5" to 32" Diagonal Screen Sizes
- ◆ Widescreen Format
- ◆ Up to 1080p Resolution
- ◆ Super Fast Response Times
- ◆ High Contrast Ratios
- ◆ NTSC/PAL Auto Sensing
- ◆ HDMI & VGA Inputs
- ◆ Looping BNC Inputs
- ◆ PC Audio Inputs
- ◆ LED Backlight
- ◆ 3D Comb Filters
- ◆ 3D De-Interlace
- ◆ Low Power Consumption
- ◆ Full OSD Control of All Monitor Functions
- ◆ Vesa Mounting

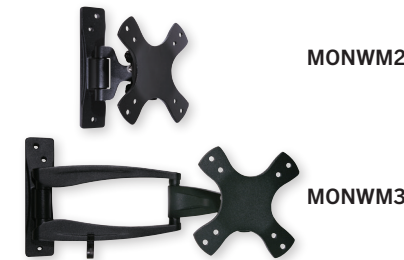
### INCLUDED ACCESSORIES:

- Remote Control ("R" Models)
- HDMI & VGA Cables
- User Manual
- Power Supply
- Power Cord



### OPTIONAL MOUNTING ACCESSORIES:\*

- ◆ **MONWM2** – Fully Adjustable Wall Mount
  - ◆ **MONWM3** – Dual Arm Fully Adjustable Wall Mount
- \*Compatible with LED18, LED22R, LED24R only



SPECIFICATION	LED18	LED22R
Video System	NTSC/PAL (Auto Sensing)	NTSC/PAL (Auto Sensing)
Max Resolution	1360 x 768	1920 x 1080
Supported Resolutions	720x400; 640x480; 800x600; 1024x768; 1280x1024; 1360x768; 1920x1080	720x400; 640x480; 800x600; 1024x768; 1280x1024; 1360x768; 1440x900; 1600x900; 1680x1050; 1920x1080
3D Comb Filter	Yes	Yes
3D De-Interlace	Yes	Yes
OSD (On Screen Display)	Yes	Yes
Auto Adjustment	Yes	Yes
Backlight	LED (RGB)	LED (RGB)
Active Display Area	18.5" Diagonal	21.5" Diagonal
Impedence	75 OHM Self Terminating	75 OHM Self Terminating
Video Input Signals	HDMI, VGA, Composite BNC	HDMI, VGA, Composite BNC
Aspect Ratio	16:9	16:9
Pixel Pitch	0.28 (H) X 0.28 (V)	0.25 (H) X 0.25 (V)
Color Depth	Over 16 Million Colors	Over 16 Million Colors
Brightness	250 cd/m2	250 cd/m2
Contrast Ratio	2000:1	2000:1
Viewing Angle (H/V)	170°/160°	170°/160°
Response Time	5ms	5ms
Certificates	CE, FCC, (UL-Power Supply)	UL/CUL, CE, FCC
Languages	English, Spanish, German, Chinese, French, Italian	English, Spanish, German, Chinese, French, Italian
Input Voltage	12 Volt DC External P/S	100 ~ 240VAC Internal P/S
Power Supply	External	External
Power Consumption	< 20W	<30W
Video Connections	2x HDMI, VGA, BNC In/Out	2x HDMI, VGA, BNC, IN/OUT
Audio Connections	PC Audio(3.5mm), Stereo RCA	PC & Stereo RCA
Dimensions w/stand (H x W x D)	13.42" x 17.8" x 7.3"	14.81" x 20.34" x 7.3"
Weight	5.51lb	8.75lb
Remote Control	N/A	N/A / Yes
Vesa Mounting	Vesa 100 x 100	Vesa 100 x 100
Operating Temperature	32° ~ 104°F	32° ~ 104°F

SPECIFICATION	LED24R	LED32R
Video System	NTSC/PAL (Auto Sensing)	NTSC/PAL (Auto Sensing)
Max Resolution	1920 x 1080	1920 x 1080
Supported Resolutions	720x400; 640x480; 800x600; 1024x768; 1280x1024; 1360x768; 1440x900; 1600x900; 1680x1050; 1920x1080	720x400; 640x480; 800x600; 1024x768; 1280x1024; 1360x768; 1440x900; 1600x900; 1680x1050; 1920x1080
3D Comb Filter	Yes	Yes
3D De-Interlace	Yes	Yes
OSD (On Screen Display)	Yes	Yes
Auto Adjustment	Yes	Yes
Backlight	LED (RGB)	LED (RGB)
Active Display Area	23.8" Diagonal	32" Diagonal
Impedence	75 OHM Self Terminating	75 OHM Self Terminating
Video Input Signals	HDMI, VGA, Composite BNC	HDMI, VGA, Composite BNC
Aspect Ratio	16:9	16:9
Pixel Pitch	0.275 (H) X 0.275 (V)	0.364 (H) X 0.364 (V)
Color Depth	Over 16 Million Colors	Over 16 Million Colors
Brightness	250 cd/m2	300 cd/m2
Contrast Ratio	1000:1	3000:1
Viewing Angle (H/V)	178°/178°	178°/178°
Response Time	5ms	6.5ms
Certificates	UL/CUL, CE, FCC	UL/CUL, CE, FCC
Languages	English, Spanish, German, Chinese, French, Italian	English, Spanish, German, Chinese, French, Italian
Input Voltage	100 ~ 240VAC Internal P/S	100 ~ 240V AC Internal P/S
Power Supply	External	External
Power Consumption	<30W	<55W
Video Connections	2x HDMI, VGA, BNC, IN/OUT	2x HDMI, VGA, BNC, IN/OUT
Audio Connections	PC & Stereo RCA	PC & Stereo RCA
Dimensions w/stand (H x W x D)	16.02" x 22.7" x 7.3"	20.63" x 29.13" x 7.75"
Weight	9.39lb	17.6 lb
Remote Control	N/A / Yes	Yes
Vesa Mounting	Vesa 100 x 100	Vesa 200 x 100
Operating Temperature	32° ~ 104°F	32° ~ 104°F

Note: Specification subject to change without notice



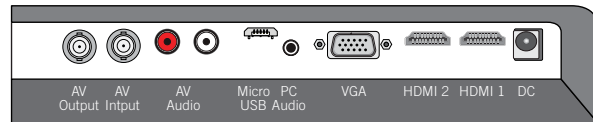
# LED17ST / LED19ST

## Security Rated 5:4 Aspect LED Monitors

### FEATURES:

- ◆ 3D Comb Filter & 3D De-Interlace
- ◆ NTSC / PAL Auto Sensing
- ◆ Includes 6' HDMI & VGA Cables
- ◆ Up to 1280 x 1024 Resolution
- ◆ 3DNR (Digital Noise Reduction)
- ◆ HDMI & VGA Video Inputs
- ◆ Looping BNC Input
- ◆ Audio Inputs
- ◆ Super-Fast 5ms Response Time
- ◆ Full OSD Control of All Monitor Functions
- ◆ 5:4 Aspect Ratio
- ◆ Vesa Mounting

### REAR PANEL CONNECTIONS:



LED17ST / LED19ST

### INCLUDED ACCESSORIES:

User Manual, 6' HDMI Cable, 6' VGA Cable, 12 Volt DC Power Supply / Power Cord

### OPTIONAL MOUNTING ACCESSORIES:

- ◆ **MONWM2**  
Fully Adjustable Wall Mount
- ◆ **MONWM3**  
Dual Arm Fully Adjustable Wall Mount



SPECIFICATION	LED17ST	LED19ST
Video System	NTSC/PAL (Auto Sensing)	
Max Resolution	1280 x 1024 (Native)	
Supported Resolutions	720x400; 640x480; 800x600; 1024x768; 1280x1024; 1920x1080 (Upscaled)	
Video Connections	HDMI, VGA, BNC 1 Input, BNC 2 Input/Output	
3D Comb Filter	Yes	
3D De-Interlace	Yes	
OSD (On Screen Display)	Yes	
Backlight	LED	
Active Display Area	17" Diagonal	19" Diagonal
Impedance	< 20W	<30W
Video Input Signals	HDMI, VGA, BNC In/Out	
Aspect Ratio	5:4	
Pixel Pitch	0.264 x 0.264 (mm)	
Color Depth	16.7 Million colors	
Brightness	220 cd/m2	
Contrast Ratio	1000:1	
Viewing Angle (H/V)	170°/160°	178°/178°
Response Time	5ms	
Auto Adjustment	Yes	
Certificates	UL/CUL (Power Supply) CE, FCC	
Languages	English, Chinese, German, French, Spanish, Italian	
Input Voltage	12VDC UL/CUL External Power Supply Included	
Power Consumption	<25W	
Audio Connections	PC Audio	
Dimensions w/stand (HxWxD)	14.6" x 15.2" x 7.2"	16.2" x 16.5" x 7.2"
Weight	9.8lb	10.5lb
Vesa Mounting	100 x 100	
Operating temperature	32° ~ 104°F	

# LED4K28

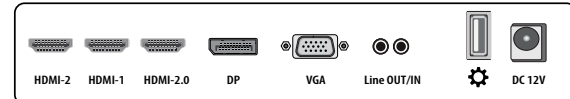
## 4K Security Rated 28" Widescreen LED Monitor w/ Display Port, VGA & (3) HDMI Inputs

### FEATURES:

- ◆ 4K / 3840 x 2160 Max Resolution
- ◆ Display Port, VGA & (3) HDMI Inputs
- ◆ 16:9 Aspect Ratio
- ◆ LED Backlight
- ◆ Super Fast 5ms Response Time
- ◆ Included IR Remote Control
- ◆ Included VGA & HDMI Cables
- ◆ PIP, PBP (2-4 Window)
- ◆ PC Audio Input/Output
- ◆ Full OSD Control
- ◆ Vesa Mounting (100x100)

### REAR PANEL CONNECTIONS:

User Manual, C-CS Mounting Adapter, Power Connector.



### INCLUDED ACCESSORIES:

Base Plate, AC Power Adapter & Cord, HDMI & VGA Cables, IR Remote Control, User's Manual

### OPTIONAL MOUNTING ACCESSORIES:

- ◆ **MONWM2**  
Fully Adjustable Wall Mount
- ◆ **MONWM3**  
Dual Arm Fully Adjustable Wall Mount



SPECIFICATION	LED4K28
Video System	NTSC/PAL (Auto Sensing)
Max Resolution	3840x2160 (4K) @ 60Hz
Remote Control	Included
Supported Resolutions	3840*2160, 2560*1440, 1920*1080, 1680*1050, 1400*900, 1280*1024, 1024*768, 800*600, 640*480
OSD (On Screen Display)	Yes
Auto Adjustment	Yes (VGA Input Only)
Backlight	LED Backlight
Active Display Area	28" Diagonal
Video Input Connections	VGA, DP, HDMI 2.0, HDMI-1, HDMI-2
VGA	1920 x 1080 Max Resolution
Display Port & HDMI 2.0	4K UHD @ 60Hz Max Resolution (DP Version 1.2, HDMI Version 2.0)
HDMI-1, HDMI-2	4K UHD @ 30Hz Max Resolution (HDMI Version 1.4)
Aspect Ratio	16:9, 4:3, 1:1, Auto (Selectable from OSD)
Pixel Pitch	0.16(H) x 0.16(V) mm
Color Depth	1.07G Colors
Brightness	300 cd/m2
Contrast Ratio	1000:1
Viewing Angle	Vertical -80°~80° / Horizontal -85°~85°
Response Time	5 ms
Languages	English, Chinese, Korean, Russian, Spanish, Japanese, French
Special Features	PIP, PBP (2, 3 & 4 Window)
Audio Connections	3.5mm Jack Input/Output
Speakers	5W x2
Power Supply	External 12Volt DC / 4Amp (cUL, FCC, CE, Lvl VI, ROHS)
Input Voltage for Power Supply	AC 100-240V 50/60HZ
Power Consumption	42W Max. in "ON" Mode
Dimensions w/Stand (W x H x D)	663(W) x 453(H) x 170(D) mm
Weight	7.2kgs(15.9lbs)
Vesa Mounting	100 x 100mm with M4 Hole
Housing Material / Color	Plastic / Black
Operating Temperature	Operation: 0°~40°C (32° ~104°F)

Note: Specification subject to change without notice

# 12 Volt DC Power Supplies

## 12VDC1AMP 1 Amp 12 Volt DC Power Supply



12VDC1AMP

### FEATURES:

- ◆ 1 Amp Output
- ◆ Class II Transformer
- ◆ UL/CUL Listed
- ◆ Level VI Efficiency

## 12VDC2AMP 2 Amp 12 Volt DC Power Supply



12VDC2AMP

### FEATURES:

- ◆ 2 Amp Output
- ◆ Class 2 Transformer
- ◆ UL/CUL Listed
- ◆ Level VI Efficiency

SPECIFICATION	12VDC1AMP	12VDC2AMP
Type	Class II, UL/CUL Listed	Class II, UL/CUL Listed
Input	AC 100-240V 50/60HZ 0.35A MAX	AC 100-240V 50/60HZ 0.35A MAX
Output	12 Volt DC 1 Amp (Regulated)	12 Volt DC 2 Amp (Regulated)
Misc.	2.1 x 5.5mm / Center Pin Positive	2.1 x 5.5mm / Center Pin Positive

## PSMINI4C5AUL 4 Channel, 5 Amp 12 Volt DC Power Supply



Power Output



Power Input



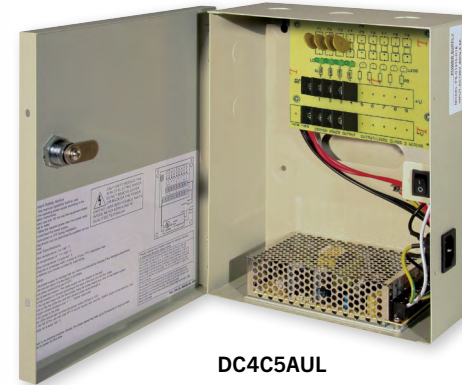
### FEATURES:

- ◆ UL / CUL Listed
- ◆ Built in PTC Fuse for Protection
- ◆ Adjustable Output Voltage up to 13.8V
- ◆ 100V-240V Wide Range Input Voltage
- ◆ LED Indicator Light
- ◆ Sliding Terminal Strip Cover
- ◆ Power Cord Included

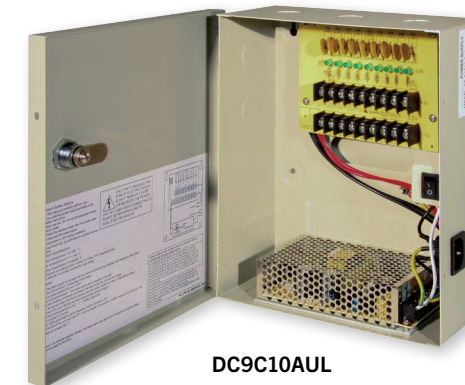
SPECIFICATION	PSMINI4C5AUL
Number of Outputs	4
Input Voltage	AC 100V-240V
Adjustable Output Voltage	12 ~ 13.8 Volt DC
Output Current	5 Amp
Fuse Type	PTC 6 Amp
LED Indicator	Yes
Certificates	UL / CUL
Operating Temperature	-22°F ~ 113°F
Weatherproof Rating	Indoor Only
Dimensions (H x W x D)	6.5" x 2.12" x 1.37"

# DC4C5AUL / DC9C10AUL / DC18C10AUL

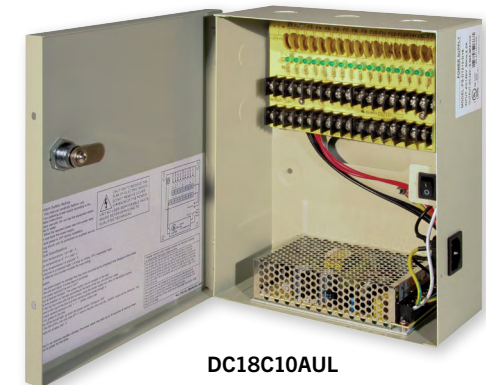
## 12VDC PTC Fused Multi-Channel Power Supplies UL Listed, 4-9-18 Channel with PTC Fuse



DC4C5AUL



DC9C10AUL



DC18C10AUL

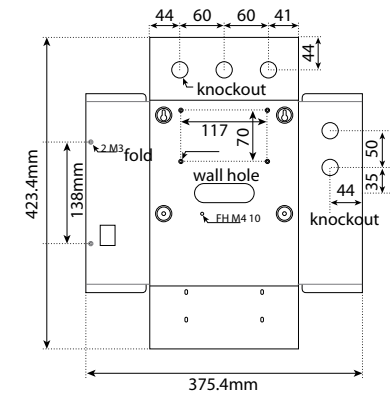
### FEATURES:

- ◆ 5 Amp Total Output (4 Ch)
- ◆ 10 Amp Total Output (9/18 Ch)
- ◆ 1.25 Amp / Channel (4 Ch)
- ◆ 1.1 Amp / Channel (9 Ch)
- ◆ 560mA / Channel (18 Ch)
- ◆ PTC Resettable Fuse Protection
- ◆ LED Channel Indicator
- ◆ Key & Lock Assembly Included
- ◆ Easy Connect 3-Prong Power Cord
- ◆ UL/CUL Certifications

SPECIFICATION	DC4C5AUL	DC9C10AUL	DC18C10AUL
Channels	4	9	18
Output Voltage	12 Volt DC		
Input Voltage	AC 120V 60Hz 1.25Amp	AC 120V 60Hz 2.5mp	
Potentiometer	Yes - (Range of 10VDC ~ 14VDC)		
Total Output Current	5 Amp	10 Amp	10 Amp
Output Current Per Channel	1.25 Amp	1.1 Amp	560mA
Output Fuse Protection	PTC Resettable Fuses		
Maximum Fuse Rating	1.6 Amp		1.1 Amp
Channel LED Indicator	Yes		
Protections	Over Power, Over Current, Over Voltage, Short Circuit		
Internal On/Off Switch	Yes		
Power Cord	Easy Connect / 3-Prong		
Key / Lock Assembly	Included		
Housing Dimensions	10.1" x 8.3" x 3.6"		
Housing Material / Color	Steel / Beige		
Housing Knockouts - 1/2"	3 Top / 2 Left Side		
Certification	UL/CUL, FCC, CE, ROHS		
Operating Temp	14° ~ 104°F		
Weatherproof Rating	Indoor Only		

Note: Specification subject to change without notice

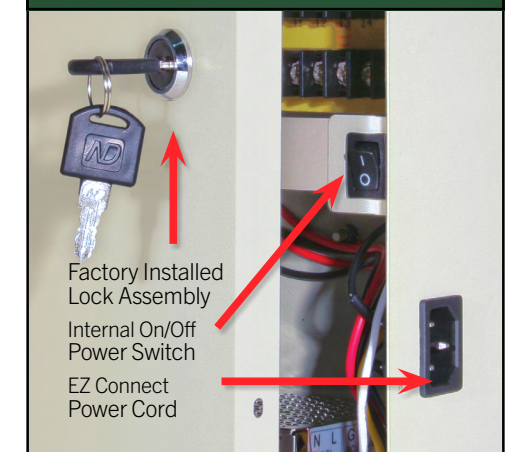
### Dimensions



### INCLUDED ACCESSORIES:

3-Prong Power Cord, 2. Keys, Mounting Template, Mounting Hardware, Knockout Grommets, Door Screws.

### PRODUCT DETAIL



# Pre-Made Cables and Connectors

## BNC & HDMI Cables, BNC & 12VDC Connectors



Model	CBL3BNC	CBL6BNC	HDMI3UL	HDMI6UL	HDMI15UL
Info	BNC Male to BNC Male Connectors		Video & Audio w/Gold Connectors		
Length	3'	6'	3'	6'	15'

## Precision Engineered BNC Connectors & Cables



Model	BNCCRIMP10PK	BNCTWIST10PK	BNCSPICE5PK	BNCFTORCAM	BNCMTORCAF	BNCT
Info	2-Piece BNC Connector	Twist-On BNC Connector	Female to Female	BNC Female to RCA Male	BNC Male to RCA Female	BNC Male to 2x BNC Female
Cable Type	RG59U	RG59U	Any	Any	Any	Any
Packaging	10 Pack	10 Pack	5 Pack	Single	Single	Single

## 12 Volt DC Connectors



Model	12VDCCORD10PK	12VDCCON10PKF	12VDCCON10PKM
Info	DC Male with 18 Gauge 12" Bare Lead Connection	DC Female with Screw Terminal Connection	DC Male with Screw Terminal Connection
Packaging	Center Pin Positive	Center Pin Positive	Center Pin Positive
Polarity	10 Pack	10 Pack	10 Pack

# 24VAC Power Supplies & Accessories

## AC2450VA 24 Volt AC 50VA Plug-in Transformer



AC2450VA

### FEATURES:

- ◆ Class II, UL Listed
- ◆ 120 Volt AC Input
- ◆ Screw Terminal Connection
- ◆ 50VA (2 Amp) Output
- ◆ Wall Outlet Safety Screw

SPECIFICATION	AC2450VA
Type	Class II UL Listed
Input	AC 120V
Output	24 Volt AC 2 Amp
Connection	Screw Terminal

## 24VACTO12VDC1A 24Volt AC to 12Volt DC Converter



24VACTO12VDC1A

### FEATURES:

- ◆ 24 VAC Input Power
- ◆ 12 Volt DC Output
- ◆ Dimensions 3" x 1.2" x 0.9" (w/o DC connector)

SPECIFICATION	24VACTO12VDC1A
Input Voltage	20~30 Volt AC or 36 Volt DC
Output Voltage/Current	12 Volt DC / 1 Amp Max
Input Connection	Bare Lead
Output Connection	Single - Bare Lead w/4" DC Connector
Protections	Isolated Filter, Overload & Short Circuit
Certifications	CE, RoHS
Operating Temperature	-14°F ~ +114°F
Weight	.09Lb
Dimensions	3" x 1.2" x 0.9" (w/o DC Connector)
Weatherproof Rating	Indoor Only

Note: Specification subject to change without notice

# BD124, BD125, BD127 & BD128

12 Volt DC, Non-Spillable Sealed Lead Acid Rechargeable Batteries  
for Fire, Alarm & CCTV Applications

## BD124

12 Volt DC 4Ah



BD124

SPECIFICATION		BD124	
Rated Capacity	77°F (25°C)	Total Height	4.25 inches (108mm)
20 hour rate (250mA)	4.5Ah	Height	4.02 inches (102mm)
10 hour rate (450mA)	4.25Ah	Length	3.54 inches (90mm)
5 hour rate (840mA)	4.1Ah	Width	2.76 inches (70mm)

## BD125

12 Volt DC 5Ah



BD125

SPECIFICATION		BD125	
Rated Capacity	77°F (25°C)	Height	4.21in (106.9 mm)
20-hr. (0.25A)	5.0 Ah	Length	3.54in (89.9 mm)
10-hr. (0.47A)	4.65 Ah	Width	2.76in (70.1 mm)
5-hr. (0.85A)	4.25 Ah	Weight	3.09 lbs (1.4 kgs)

## BD127

12 Volt DC 7Ah



BD127

SPECIFICATION		BD127	
Rated Capacity	77°F (25°C)	Height	4.02 inches (102mm)
20 hour rate (375mA)	7.5Ah	Length	5.95 inches (151mm)
10 hour rate (690mA)	6.9Ah	Width	2.56 inches (65mm)
5 hour rate (1280mA)	6.4Ah	Weight	Approx. 5.35 lbs (2.43Kg)

## BD128

12 Volt DC 8Ah



BD128

SPECIFICATION		BD128	
Rated Capacity	77°F (25°C)	Height	4.21in (106.9 mm)
20-hr. (0.40A)	8.0 Ah	Length	3.54in (89.9 mm)
10-hr. (0.74A)	7.44 Ah	Width	2.76in (70.1 mm)
5-hr. (1.36A)	6.80 Ah	Weight	4.96 lbs (2.25 kgs)

# S20WSU, D30WU, D20WU & D15WU

Single & Dual Tone Sirens  
30, 20 & 15 Watt

## S20WSU

20 Watt, Single Tone



S20WSU

SPECIFICATION		S20WSU	
Power	20 Watt		
Tone	Yelp		
Voltage	6~13.5 Volts DC		
Decibels	115 dB (max)		
Current	750~950 mA		
Dimensions [D x L x H]	Ø5.3 x 5.9 x 6.1 (in) Ø135 x 150 x 155 (mm)		
Weight	Weight 1.05lbs / 480g		
Weatherproof Rating	IP 55		

## D30WU

30 Watt, Dual Tone



D30WU

SPECIFICATION		D30WU	
Power	30 Watt		
Tone	Yelp & Steady		
Voltage	6~13.5 Volts DC		
Decibels	120 dB ±5		
Current	800~1200 mA		
Dimensions [W x D x H]	8.66 x 9.44 x 6.7 (in) 220 x 240 x 170 (mm)		
Weight	Weight 2.8lbs / 560g		
Weatherproof Rating	IP 55		

## D20WU

20 Watt, Dual Tone



D20WU

SPECIFICATION		D20WU	
Power	20 Watt		
Tone	Yelp & Steady		
Voltage	6~13.5 Volts DC		
Decibels	115 dB (max)		
Current	750~950 mA		
Dimensions [D x L x H]	Ø5.3 x 5.9 x 6.1 (in) Ø135 x 150 x 155 (mm)		
Weight	Weight 1.05lbs / 480g		
Weatherproof Rating	IP 55		

## D15WU

15 Watt, Dual Tone



D15WU

SPECIFICATION		D15W	
Power	15 Watt		
Tone	Yelp & Steady		
Voltage	6~13.5 Volts DC		
Decibels	108 dB ±5		
Current	500±100 mA		
Dimensions [W x D x H]	4.3 x 2.36 x 4.3 (in) 110 x 60 x 110 (mm)		
Weight	Weight 1.05lbs / 440g		
Weatherproof Rating	Indoor Only		

Note: Specification subject to change without notice



N3 NVR Series Models	N3NVR4POE	N3NVR8POE	N3NVR16POE	N3NVR3216POE	N2 Series IP Camera Models	N2IP4BSD	N2IP4DSD / N2IP4D4MMSD	N2IP4TSD	N2IP4WSD	N2IP4AFBSD	N2IP4AFDSD	N2IPPTZ30XSD
<b>Maximum IP Cameras</b>	4-Channel	8-Channel	16-Channel	32-Channel	<b>Max Resolution</b>	4.0 Megapixel						2.0 Megapixel
<b>Built-In POE Channels</b>	4	8	16	16	<b>POE</b>	POE (IEEE 802.3af) & 12VDC						Hi-POE/24VAC
<b>Max Record Resolution</b>	Up to 8MP			Up to 12MP	<b>Wide Dynamic Range</b>	Yes True 120dB Wide Dynamic Range						
<b>Playback</b>	4Ch @ 1080p			16Ch @ 1080p	<b>Frame Rate</b>	2560x1440 @ 30FPS						1920x1080 @ 30FPS
<b>Plug &amp; Play Models</b>	"N2 Series Only" N2IP4B/SD, N2IP4D/SD, NIP4D4MM/SD, N2IP4T/SD, N2IP4W/SD, N2IP4AFB/SD, N2IP4AFD/SD, N2IPPTZ30X/SD, N2IPKITCAM/SD				<b>Lens Size</b>	2.8mm	2.8mm/4mm	2.8mm	2.8mm	Autofocus 2.7-13.5mm	Autofocus 2.7-13.5mm	30X Optical (4.5-135mm)
<b>Incoming Bandwidth</b>	40 Mbps	80 Mbps	160 Mbps	320 Mbps	<b>Smart Analytics</b>	Perimeter, Single Virtual Fence, Double Virtual Fence						
<b>Drive Bays</b>	1	2	2	4	<b>IR Distance</b>	100'	100'	100'	45'	120'	100'	600'
<b>Max Storage</b>	12TB	24TB	24TB	48TB	<b>SD Card Slot</b>	Yes, Supports 256GB Max						
<b>POE Power</b>	40W	120W		160W	<b>True D/N - IR Lens</b>	Yes						
<b>Record Modes</b>	Manual, Schedule (Regular, Continuous), Motion Detection, Alarm In				<b>Triple Streams</b>	Yes						
<b>Power Supply</b>	External 48 Volt DC	Internal 120 -240 Volt AC			<b>Compatibility</b>	ONVIF Profile S/G/Q Compliant						
<b>Multiple Outputs</b>	HDMI & VGA Mirrored	Independent HDMI & VGA			<b>Power Consumption</b>	8W Max	8W Max	8W Max	6W Max	8W Max	8W Max	> 40W Max
<b>Audio</b>	3.5mm In/Out for 2-Way Audio				<b>Weatherproof Rating</b>	IP67	IP67/IK10	IP67	IP66	IP67	IP66/IK10	IP66
<b>Free Mobile App</b>	NorthernView Mobile App for iPhone, iPad, Adroid & Android Tablets				<b>Free Mobile App</b>	NorthernView Mobile App for iPhone, iPad, Adroid & Android Tablets						
<b>Free Software</b>	Northern CMS, Utility Tool				<b>Free Software</b>	Northern CMS, Utility Tool						



N3 HVR Series Models	N3HVR4	N3HVR8	N3HVR16	4-in-1 HD Camera Models	HDTIR90WD	HDAFDIR90INWD	HDAFDIR90WD	HDAFBIR120WD	HDBIR60WD	HDEIR60	HDDWMIR
<b>Analog Camera Inputs</b>	4 Ch.	8 Ch.	16 Ch.	<b>Max Resolution</b>	2 Megapixel, 1920 x 1080p						
<b>Additional IP Camera Channels</b>	+2	+4	+8	<b>Multiple Formats</b>	TVI - CVI - AHD - 960H Selectable						
<b>Video Output</b>	Simultaneous VGA & HMDI Main Monitor Outputs			<b>Video Output</b>	Single Main Output - Multiple Format Selectable via OSD Joystick or Dipswitch						
<b>Record Resolution</b>	Up to 8MP Lite @ 7FPS Up to 1080p @ 15FPS			<b>Lens Size</b>	2.8mm	2.8-12mm Autofocus	2.8-12mm Autofocus	2.8-12mm Autofocus	2.8mm	2.8mm	2.8mm
<b>Total IP Channel w/ Analog Disable</b>	6	12	24	<b>True Wide Dynamic Range</b>	True WDR 120dB	True WDR 120dB	True WDR 120dB	True WDR 120dB	True WDR 120dB	Digital WDR	Digital WDR
<b>IP Record Resolution</b>	1080p Max			<b>IR LED Count</b>	1 High Power	15 IR LED	15 IR LED	30 IR LED	24 IR LED	18 IR LED	12 IR LED
<b>Record Modes</b>	Manual, Schedule (Regular, Continuous), Motion Detection, Alarm In			<b>IR LED Range</b>	90'	90'	90'	120'	60'	60'	60'
<b>Audio Input (RCA)</b>	1	8	6	<b>True D/N IR Corrective</b>	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<b>Audio Output</b>	1-Channel RCA Output			<b>UTC Control</b>	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<b>Max Storage Size</b>	8TB	16TB	16TB	<b>OSD Joystick</b>	Cable Mount						
<b>Rack Mounting</b>	N/A	Yes	Yes	<b>Power Requirement</b>	250mA Max	290mA Max	290mA Max	550mA Max	390mA Max	280mA Max	450mA Max
<b>Free Mobile App</b>	NorthernView Mobile App for iPhone, iPad, Adroid & Android Tablets			<b>Housing Color</b>	White	White	White	White	White	White	Gray
<b>Software Included</b>	Northern CMS, Utility Tool			<b>Temp Rating</b>	-14°F ~ 131°F	14°F ~ 131°F	-14°F ~ 131°F	-14°F ~ 131°F	-14°F ~ 131°F	-14°F ~ 131°F	-14°F ~ 122°F
				<b>Weatherproof Rating</b>	IP67	Indoor Only	IP66	IP67	IP66	IP66	IP66



4-in-1 HD Camera Models	HDMEIR90	HDMEIR90W	HDMBIR120	HDMBIR120W	HDBIR60	HDBVFIR120	HDDWIDE	HDLPCAM	HDPTZ33X	HDBXWDR
<b>Max Resolution</b>	2 Megapixel, 1920 x 1080									5 Megapixel 2688 x 1944
<b>Multiple Formats</b>	TVI - CVI - AHD - 960H Selectable									
<b>Video Output</b>	Single Main Output - Multiple Format Selectable via OSD Joystick, Dipswitch or Back Panel									
<b>Lens Size</b>	Motorized 2.8-12mm	Motorized 2.8-12mm	Motorized 2.8-12mm	Motorized 2.8-12mm	3.6mm	2.8-12mm	2.5mm (150° FoV)	Motorized 9-22mm	33x Optical Zoom	C/CS Mount Lens Sold Separately
<b>True Wide Dynamic Range</b>	Digital WDR	Digital WDR	Digital WDR	Digital WDR	Digital WDR	Digital WDR	Digital WDR	Digital WDR	Digital WDR	True WDR 120dB
<b>IR LED Count</b>	24IR LED	24IR LED	42 IR LED	42 IR LED	18 IR LED	30 IR LED	24 IR LED	42 IR LED	12 High Power LED	N/A
<b>IR LED Range</b>	90'	90'	120'	120'	60'	120'	60'	50'	450'	N/A
<b>True D/N IR Corrective</b>	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<b>UTC Control</b>	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<b>OSD Joystick</b>	Cable Mount	Cable Mount	OSD Hatch	OSD Hatch	Cable Mount	Cable Mount	Cable Mount	OSD Hatch	N/A	Back Panel
<b>Power Requirement</b>	430mA Max	430mA Max	600mA Max	600mA Max	350ma Max	550mA Max	350mA Max	900mA Max	2.5A Max	180mA Max
<b>Housing Color</b>	Gray	White	Gray	White	White	White	White	White	White & Black	White & Black
<b>Temp Rating</b>	-14°F ~ 122°F	-14°F ~ 122°F	-14°F ~ 122°F	-14°F ~ 122°F	-14°F ~ 122°F	-14°F ~ 122°F	-14°F ~ 122°F	-22°F ~ 122°F	-40° ~ 140°F	14°F ~ 140°F
<b>Weatherproof Rating</b>	IP66	IP66	IP66	IP66	IP66	IP66	IP66	IP66	IP66	Indoor Only






















































N3 Series IP Kit Models	N3NVR4KIT4C	N3NVR8KIT6C	N3 Series HD Analog Kit Models	N3HVR4KIT4C	N3HVR8KIT6C
<b>Cameras Included</b>	4	6	<b>Cameras Included</b>	4	6
<b>Max IP Channels</b>	4-Channel	8-Channel	<b>Max Analog Channels</b>	4-Channel	8-Channel
<b>NVR Storage</b>	2 Terabyte Built-in Storage		<b>DVR Storage</b>	2 Terabyte Built-in Storage	
<b>NVR Compression</b>	H.265 & H.264 Compression Formats		<b>DVR Compression</b>	H.265 & H.264 Compression Formats	
<b>Record Modes</b>	Manual, Schedule (Regular, Continuous), Motion Detection, Alarm In		<b>Record Modes</b>	Manual, Schedule (Regular, Continuous), Motion Detection, Alarm In	
<b>Power Supply</b>	External 48 Volt DC	Internal 120-240 Volt AC	<b>Power Supply</b>	Ext. 12 Volt DC 2A	Ext. 12 Volt DC 4A
<b>Audio</b>	3.5mm In/Out for 2-Way Audio		<b>Audio</b>	1 RCA Input	8 RCA Inputs
<b>Incoming Bandwidth</b>	40Mbps	80Mbps	<b>Record Rate</b>	15FPS @ 1080p	
<b>Camera Resolution</b>	4 Megapixel (2560x1440)		<b>Camera Resolution</b>	1080p (2 Megapixel)	
<b>Camera Lens</b>	2.8mm Fixed Focal IR Lens		<b>Camera Lens</b>	2.8mm Fixed Focal IR Lens	
<b>Camera IR LED Range</b>	2 High power IR LED's / 100' IR Range		<b>Camera IR LED Range</b>	18 IR LED's / 60' IR Range	
<b>Weatherproof Rating</b>	IP66		<b>Weatherproof Rating</b>	IP66	
<b>Free Mobile App</b>	NorthernView Mobile App for iPhone, iPad, Adroid & Android Tablets		<b>Free Mobile App</b>	NorthernView Mobile App for iPhone, iPad, Adroid & Android Tablets	
<b>Free Software</b>	Northern CMS, Utility Tool		<b>Free Software</b>	Northern CMS, Utility Tool	
Optional Accessories & Cameras			Optional Accessories & Cameras		
<b>18" Security Monitor</b>	LED18R – 1080p, HDMI/VGA Inputs		<b>18" Security Monitor</b>	LED18R – 1080p, HDMI/VGA Inputs	
<b>24" Security Monitor</b>	LED24R – 1080p, HDMI/VGA inputs, IR Remote		<b>24" Security Monitor</b>	LED24R – 1080p, HDMI/VGA inputs, IR Remote	
<b>32" Security Monitor</b>	LED32R – 1080p, HDMI/VGA inputs, IR Remote		<b>32" Security Monitor</b>	LED32R – 1080p, HDMI/VGA inputs, IR Remote	
<b>4MP Autofocus IP Bullet</b>	N2IP4AFBSD - 2.7-13.5mm, 120' IR		<b>1080p Autofocus Bullet</b>	HDAFBIR120WD - 2.8-12mm, 120' IR	
<b>4MP Autofocus IP Dome</b>	N2IP4AFDSD - 2.7-13.5mm, 90' IR		<b>1080p Autofocus Dome</b>	HDAFDIR90WD - 2.8-12mm, 90' IR	
<b>4MP Fixed Lens Bullet</b>	N2IP4BSD - 2.8mm Bullet, 100' IR		<b>1080p Autofocus Indoor Dome</b>	HDAFDIR90INWD - 2.8-12mm Dome 90' IR Indoor	
<b>4MP Fixed Lens Turret</b>	N2IP4TSD - 2.8mm Turret, 100' IR		<b>1080p Fixed Lens Bullet</b>	HDBIR60WD - 2.8mm Bullet, 60' IR	
<b>4MP Fixed Lens Wedge</b>	N2IP4WSD - 2.8mm Wedge, 100' IR		<b>1080p Fixed Lens Turret</b>	HDTIR90WD - 2.8mm Turret, 90' IR	
<b>4MP Fixed Lens Dome</b>	N2IP4DSD - 2.8mm Dome, 100' IR		<b>1080p Varifocal Eyeball</b>	HDDWMVFIR - 2.8-12mm Eyeball, 90'	
<b>4MP Fixed Lens Dome</b>	N2IP4D4MMSD - 4mm Dome, 100' IR		<b>1080p Varifocal Bullet</b>	HDMBIR120 - 2.8-12mm Bullet, 120' IR	
<b>4MP Fixed Lens Eyeball</b>	N2IPKITCAMSD - 2.8mm Eyeball, 100' IR		<b>1080P Fixed Lens Eyeball</b>	HDEIR60 - 2.8mm Eyeball, 60' IR	



Northern’s New N2 Mounting accessories include a redesigned Hinged Wall Mount, Pendant Mount, as well as Junction Boxes & Pendant Caps to make installation easier and cameras more aesthetically pleasing. Chart below shows accessories needed for different mounting applications.



Camera Models	Mount Type	Required Accessories	Accessory Photos	Mounted Camera Examples
 <b>N2IP4BSD / HDBIR60WD</b>	Junction Box	N2JB1 Junc. Box		
	Pole	N2JB1 + N2POLEMT2 Junc. Box + Pole Mount		
 <b>N2IP4DSD / N2IP4D4MMSD</b>	Junction Box	N2JB2 Junc. Box		
	Pendent	N2PC2 + N2CPM1 Pend. Cap + Pend. Mount		
	Wall	N2PC2 + N2HWM1 Pend. Cap + Wall Mount		
	Pole	N2PC2 + N2HWM1 + N2POLEMT2 Pend. Cap + Wall Mount + Pole Mount		
 <b>N2IP4TSD / HDTIR90WD</b>	Junction Box	N2JB3 Junc. Box		 <p style="text-align: right;">Mounts shown with <b>HDTIR90WD</b></p>
	Pendent	N2PC3 + N2CPM1 Pend. Cap + Pend. Mount		
	Wall	N2PC3 + N2HWM1 Pend. Cap + Wall Mount		
	Pole	N2PC3 + N2HWM1 + N2POLEMT2 Pend. Cap + Wall Mount + Pole Mount		

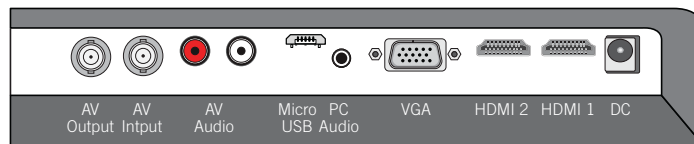
Camera Models	Mount Type	Required Accessories	Accessory Photos	Mounted Camera Examples
 <b>N2IP4WSD</b>	Junction Box	N2JB4 Junc. Box		
	Pendent	N2PC4 + N2CPM1 Junc. Box + Pendent Mount	 + 	
	Wall	N2PC4 + N2HWM1 Junc. Box + Wall Mount	 + 	
	Pole	N2PC4 + N2HWM1 + N2POLEMT2 Junc. Box + Wall Mount + Pole Mount	 +  + 	
 <b>N2IPKITCAMSD</b>	Junction Box	N2JB3 Junc. Box		
	Pendent	N2PC2 + N2CPM1 Junc. Box + Pendent Mount	 + 	
	Wall	N2PC2 + N2HWM1 Junc. Box + Wall Mount	 + 	
	Pole	N2PC2 + N2HWM1 + N2POLEMT2 Junc. Box + Wall Mount + Pole Mount	 +  + 	
 <b>N2IP4AFBSD / HDAFBIR120WD</b>	Junction Box	N2JB1 Junc. Box		
	Pole	N2JB1 + N2POLEMT2 Junc. Box + Pole Mount	 + 	
 <b>N2IP4AFDSD / HDAFDIR90WD / HDAFDIR90INWD</b>	Junction Box	N2JB5 Junc. Box		 <p style="text-align: right;">Mounts shown with <b>N2IP4AFDSD</b></p>
	Pendent	N2PC5 + N2CPM1 Junc. Box + Pendent Mount	 + 	
	Wall	N2PC5 + N2HWM1 Junc. Box + Wall Mount	 + 	
	Pole	N2PC5 + N2HWM1 + N2POLEMT2 Junc. Box + Wall Mount + Pole Mount	 +  + 	



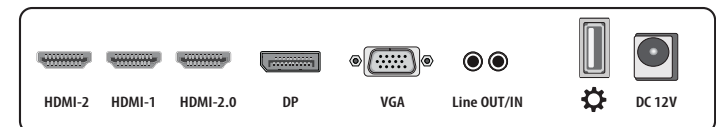
Monitor Models	LED17ST	LED19ST	LED18	LED22R	LED24R	LED32R	LED4K28
Screen Size	17"	19"	18.5"	21.5"	23.8"	32"	28"
Aspect Ratio	5:4	5:4	16:9	16:9	16:9	16:9	16:9
Max Resolution	1080p (Upscaled)	1080p (Upscaled)	1080p (Upscaled)	1080p	1080p	1080p	4K
Pixels	1280 x 1024	1280 x 1024	1360 x 768	1920 x 1080	1920 x 1080	1920 x 1080	3840 x 2160
Remote Control	No	No	No	Yes	Yes	Yes	Yes
Video Inputs	2x HDMI, VGA, BNC In/Out						3x HDMI, VGA, DP
Audio Inputs	PC Audio(3.5mm), Stereo RCA						PC Audio(3.5mm)
Viewing Angle	170°/160°	178°/178°	170°/160°	170°/160°	178°/178°	178°/178°	165°/165°
Remote Control	No	No	No	Yes	Yes	Yes	Yes
Brightness	220 cd/m2	250 cd/m2	250 cd/m2	250 cd/m2	250 cd/m2	300 cd/m2	300 cd/m2
Contrast	1000:1	1000:1	2000:1	2000:1	1000:1	3000:1	3000:1
Response Time	5ms	5ms	5ms	5ms	5ms	6.5ms	5ms
Vesa Mounting	75 x 75	75 x 75	100 x 100	100 x 100	100 x 100	200 x 100	100 x 100
Weight	9.8lb	10.5lb	5.51lb	8.75lb	9.39lb	17.6 lb	15.9lb
H x W x D (with stand)	14.6" x 15.2" x 7.2"	16.2" x 16.5" x 7.2"	13.4" x 17.8" x 7.3"	14.8" x 20.34" x 7.3"	16.1" x 22.7" x 7.3"	20.6" x 29.1" x 7.7"	17.8" x 26.1" x 6.7"

## REAR PANEL CONNECTIONS:

### LED17ST, LED19ST, LED18, LED22R, LED24R & LED32R



### LED4K28



## 2023 CATALOG PRODUCT INDEX

TABLE OF CONTENTS _____	2~3	HDAFDIR90INWD _____	27	LED18/LDED22R _____	46
N3NVRPOE Series NVR's _____	4~7	HDTIR90WD _____	28	LED24R, LED32R _____	47
N3NVR 4 & 8 Channel Kits _____	8	HDBIR60WD _____	29	LED17ST/19ST _____	48
N2IPKITCAMSD _____	9	HDAFBIR120WD _____	30	LED4K28 _____	49
N2IP4BSD _____	10	HDBIR60 _____	31	12 Volt DC Power Supplies _____	50
N2IP4AFBSD _____	11	HDBVFIR120 _____	32	DC4C5AUL, DC9C10AUL, DC18C10AUL _	51
N2IP4DSD / N2IP4D4MMSD _____	12	HDMBIR120 / HDMBIR120W _____	33	Pre-Made Cables and Connectors _____	52
N2IP4AFDSD _____	13	HDLPCAM _____	34	24VAC Power Supplies & Accessories ___	53
N2IP4TSD _____	14	HDBXWDR _____	35	BD124, BD125, BD127 & BD128 _____	54
N2IP4WSD _____	15	HDPTZ33X _____	36-37	S20WSU, D30WU, D20WU, D15WU ____	55
N2IPPTZ30XSD _____	16~17	N2 Series Wall, Pendent & Pole Mounting ___	38	N3 Series NVR's & N2 "SD" Series IP Cameras _	56
N3HVR Series 5-in-1 Hybrid DVR ___	18~21	N2 Series Pendent Caps _____	39	N3 Series HVR's & 4-in-1 Camera Quick Guide ___	57
N3HVR 4 & 8 Channel Kits _____	22	N2 Series PTZ Mounting Accessories ___	41	4-in-1 Camera Quick Guide [Continued] _	58
HDEIR60 / HDDWMIR _____	23	VC3PAIRHD / VC4PAIRHD _____	42	N3 IP & HD Analog Kit Quick Guide _____	59
HDDWIDE _____	24	VC5PAIRHD / HDGLC _____	43	N2 "SD" Series Camera Mounting Guide _	60~61
HDMEIR90 / HDMEIR90W _____	25	HDQS4L _____	44	Security Rated LED Monitor Quick Guide ___	62
HDAFDIR90WD _____	26	HDMISPL14 _____	45	Catalog Product Index _____	63