

Explosion Proof Panoramic

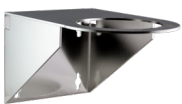
TNM-P9022EPT3-Z

2MP x 4CH H.265 Explosion Proof Panoramic 209° Network Camera



The TNM-P9022EPT3-Z is a cFMus Class I/II/III, Division 1 (Groups: B, C, D, E, F, G) and IECEx & ATEX Zone 1/21 (IIB+H2/IIIC) camera system. The housing is proudly designed and manufactured in the USA to exceed the highest global industry standards for safe operation in hazardous or potentially combustible environments and in the most extreme weather conditions.

Accessories (Optional)



HT-SD-WM
Wall Mount Bracket



HT-SPMA-SD
Pole Mount Bracket



HT-SD-FP
Protection Cable
(Supplied with camera unit)



HT-SD-CM
Corner Mount Bracket

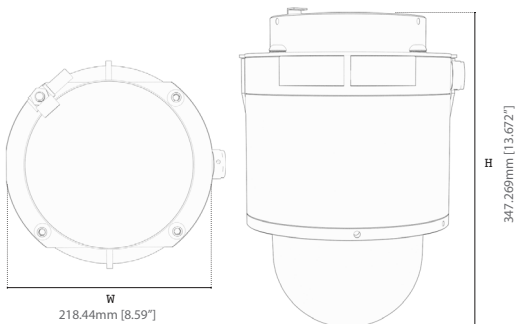
The TNM-P9022EPT3-Z utilizes an industry first patented multi-chambered enclosure design, with an explosion proof bulkhead used between chambers with each bulkhead including access ports to allow electrical/network connections to be safely passed through. The TNM-P9022EPT3-Z is designed with corrosion resistant marine-grade aluminum with an IP66/67 Type 4X rating for protection against water/dust particles and is certified to withstand temperatures ranging from -20°C to +55°C. The enclosure also features a patented GORE-TEX® Breather Drain membrane system incorporated into the housing design: air within the enclosure is allowed to equalize with the surrounding atmosphere, preventing interior condensation and negating any potential damage to the onboard electronics.

The TNM-P9022EPT3-Z utilizes 802.3at Power over Ethernet (PoE+) for power and network connectivity, providing a flexible low-voltage install solution.

Key Features

- Certified for Class I/II/III, Division 1, IECEx-ATEX Zone 1/21
- PoE+
- Light weight: 12.247 kg (27lbs)
- Marine-Ready Aluminum
- Dual Patented Technology

Dimensions



Seamless 180° Views

The TNM-P9022EPT3-Z provides an expansive panoramic image with (4) 2MP multi-sensors, and up to a 8.3MP stitched image. It offers both 180° & 209° coverage depending on the mount, and up to a 83° vertical coverage, allowing you to monitor a wide area with a single camera. Additionally, you can also mount 2 cameras back-to-back and achieve a complete 360° overview.

TNM-P9022EPT3-Z

2MP x 4CH H.265 Explosion Proof Panoramic 209° Network Camera



Specifications

VIDEO	
Imaging Device	1/2.8" CMOS x 4
Resolution	[209° Mode] 4608X1800, 4032X1576, 3456X1352, 2864X1124, 2304X900, 1728X676, 1152X452, 560X224, 720x576 [180° Mode] 4096X1800, 3584X1576, 3072X1352, 2560X1124, 2048X900, 1536X676, 1024X452, 512X224, 720X576
Max. Frame Rate	H.265/H.264: 30fps, MJPEG: 30fps
Min. Illumination	Color: 0.1Lux (1/30 sec, F1.6) , B/W: 0.01Lux (1/30 sec, F1.6)
Video Out	USB: Micro USB Type B, 1280x720 for installation
LENS	
Focal Length (Zoom Ratio)	2.8mm fixed focal x 4
Max. Aperature Ratio	F1.6
Angular Field of View	H: 209°/180°, V: 83°
Focus Control	Fixed
PAN/TILT/ROTATE	
Pan/Tilt/Rotate Range	0°~355° / 0°~60° / -
OPERATIONAL	
Camera Title	Displayed up to 85 characters
Day & Night	Auto (ICR)
Backlight Compensation	BLC / HLC / WDR / SSSR
Wide Dynamic Range (WDR)	Extreme WDR (120dB)
Digital Noise Reduction	SSNRV
Defog	Support
Motion Detection	8ea, 8point polygonal zones
Privacy Masking	32ea, polygonal zones - Color: Grey/Green/Red/Blue/ White - Mosaic
Gain Control	Low / Middle / High
White Balance	ATW / AWC / Manual / Indoor / Outdoor
Electronic Shutter Speed	Minimum / Maximum / Anti flicker (2 ~ 1/12,000sec)
Video Rotation	Flip, Mirror
Analytics	Defocus Detection, Motion Detection, Appear/Disappear, Enter/Exit, Tampering, Virtual Line, Audio Detection
Business Intelligence	Heatmap
Alarm I/O	Selectable 2 port
Alarm Triggers	Analytics, Network disconnect, Alarm input
Alarm Events	File upload via FTP and E-Mail, Notification via E-Mail, TCP and HTTP, Local storage (SD/SDHC/SDXC) or NAS recording at alarm triggers, Handover/Presert
Audio In	Selectable(microphone in/line in) Supply voltage: 2.5VDC(4mA), Input impedance: 2K Ohm
Audio Out	Line out, Maximum output level: 1Vrms

NETWORK	
Ethernet	Metal shielded RJ-45 (10/100BASE-T)
Video Compression	H.265 / H.264: Main / Baseline / High, MJPEG
Audio Compression	G.711 u-law / G.726 Selectable, G.726(ADPCM) 8KHz, G.711 8KHz, G.726 : 16Kbps, 24Kbps, 32Kbps, 40Kbps, AAC-LC : 48Kbps at 16KHz
Smart Codec	Manual (5ea area), WiseStream II
Bitrate Control Method	H.264 / H.265 : CBR or VBR, MJPEG : VBR
Streaming	Unicast (20 users) / Multicast, Multiple streaming (Up to 10 profiles)
Protocol	IPv4, IPv6, TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTCP, RTSP, NTP, HTTP, HTTPS, SSL/TLS, DHCP, FTP, SMTP, ICMP, IGMP, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, QoS, PIM-SM, UPnP, Bonjour, LLDP, SRTMP
Security	HTTPS (SSL) Login Authentication, Digest Login Authentication IP Address Filtering, User Access Log, 802.1X Authentication (EAP-TLS, EAP-LEAP), Device Certificate
Application Programming Interface	ONVIF Profile S/G/T, SUNAPI (HTTP API), Wisenet Open Platform

GENERAL	
Webpage Language	English, Korean, Chinese, French, Italian, Spanish, German, Japanese, Russian, Swedish, Portuguese, Czech, Polish, Turkish, Dutch, Hungarian, Greek Micro
Edge Storage	SD / SDHC / SDXC 2 slots 1TB (512GB x 2)
Memory	4GB RAM, 512MB Flash
Input Voltage	PoE+ (IEEE802.3at, Class4)
Power Consumption	PoE+: Maximum 18W, Typical 10.4W
Storage Temperature / Humidity	-50°C ~ +60°C (-58°F ~ +140°F) / Less than 90% RH
Operational Temperature / Humidity	-20°C ~ +55°C (-4°F ~ +131°F) / Less than 95% RH (Non-condensing)
Casing	Aluminum
Weight	12.247kg (27lbs)

DIMENSIONS	
Width (W)	218.44mm (8.59")
Height (H)	347.269mm (13.672")

GENERAL LABELS ONLY, SEE SPECIFIC MODEL FOR DETAILS

SPECIALIZING IN EXPLOSION PROOF TECHNOLOGY
8935 ALMEDA GENOA RD. HOUSTON, TEXAS 77075 USA

MADE IN USA
CERT NO. FM17U50156X & FM18CA0103X

MODEL: D503-A-PNM-9022V-BD **SERIAL:**

INPUT: 44-57 Vdc 18W

Class I, Zone 1, AEx/Ex db IIB+H2 T6 Gb Ta = -20°C to +55°C, Type 4X, IP66
Zone 2I, AEx/Ex tb IIIC T85°C Db Ta = -20°C to +55°C, Type 4X, IP66
II 2 G Ex db IIB+H2 T6 Gb Ta = -20°C to +55°C, IP66
II 2 D Ex tb IIIC T85°C Db Ta = -20°C to +55°C, IP66
CERT NO. FM18ATEX0057X & IECEx FMG 18.0020X

WARNING: DO NOT OPEN WHEN ENERGIZED OR WHEN AN EXPLOSIVE ATMOSPHERE MAY BE PRESENT
INSTALL SEAL AT ENCLOSURE ENTRY

US Patent 9917428
US Patent D858611

www.spectrumcamera.com

SPECIALIZING IN EXPLOSION PROOF TECHNOLOGY
8935 ALMEDA GENOA RD. HOUSTON, TEXAS 77075 USA

FABRICADO NO EUA
CERT NO. NCC 20.0083 X
MODELO: D503-A-PNM-9022V-BD
ALIMENTAÇÃO: 57Vdc 18W

Segurança
NCC 20.0083 X
Ex db IIB+H2 T6 Gb Ta = -20°C to +55°C,
Ex tb IIIC T85°C Db Ta = -20°C to +55°C
IP66

INMETRO
NCC 20.0083 X

ATENÇÃO:
- ENTRADAS DE CABOS M30 X 1.5
- NÃO ABRA ENQUANTO UMA ATMOSFERA EXPLOSIVA PUDE ESTAR PRESENTE
- INSTALAR ANEL DE VEDAÇÃO NAS ENTRADAS
- NÃO ABRIRE QUANDO ENERGIZADO
- RISCO POTENCIAL DE CARGA ELETROSTÁTICA - VER INSTRUÇÕES

Patente EUA 9917428
Patente EUIA D858611

CERT NO. FM17U50156X

SPECIALIZING IN EXPLOSION PROOF TECHNOLOGY

8935 ALMEDA GENOA RD.
HOUSTON, TEXAS 77075
USA

INPUT: 44-57 VDC 18W;

MODEL NUMBER: D 503-A-PNM-9022V-BD **SERIAL:**

Class I Division 1 Groups B,C,D T6, Type 4X, IP66
Class II/III, Division 1, Groups E,F,G T6

-WARNINGS: Ta = -20°C to +55°C
-NOT INCLUDING KETONE OR ESTER ATMOSPHERES
-CONDUIT ENTRIES ARE M20 X 1.5
-DO NOT OPEN WHEN AN EXPLOSIVE ATMOSPHERE MAY BE PRESENT
-INSTALL SEAL AT ENCLOSURE ENTRY

US Patent 9917428
US Patent D858611