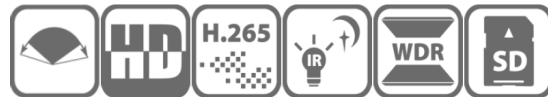# HORUS

HO-I-EEN4FP-0168 | **4MP IP 180°C eyeball camera, panoramic lens 1.68mm, IR max. 10m, power supply PoE+ or 12Vdc**

- 1/2.7" Progressive Scan CMOS
- 2688 × 1520 @ 25fps
- 1.68 mm ultra wide angle fixed lens
- 120dB WDR
- H.265, H.265+, H.264, H.264+
- Built-in micro SD/SDHC/SDXC card slot, up to 256 GB
- 3-Axis adjustment
- Indoor

HORUS CAMERA SURVEILLANCE

Horus offers a complete range of professional camera surveillance (IP cameras, IP recorders and accessories). These products contain the most innovative technologies on the market, making them suitable for different security projects (private, SME and industrial installations). With the practical and simple Horus app you can remotely consult live or recorded camera surveillance images. Push notifications on your smartphone or tablet keep you informed in real time.

SPECIFICATIONS

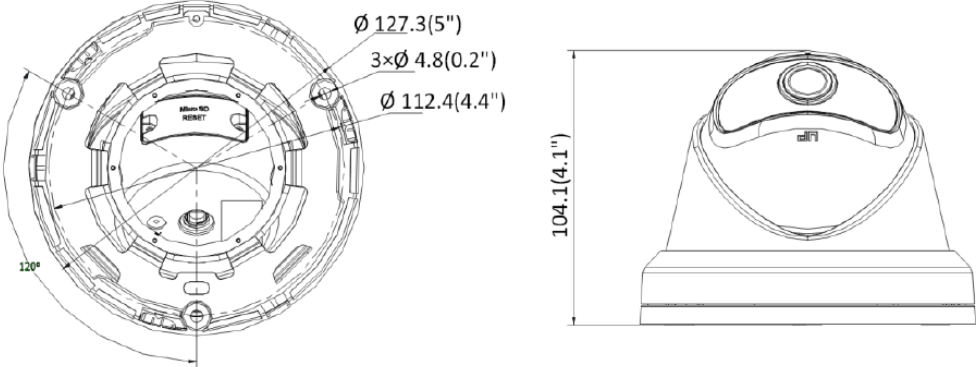| Camera	
Image sensor	1/2.7" Progressive Scan CMOS
Min. Illumination	Color: 0.028 Lux @ (F2.0, AGC ON) B&W: 0.0028 Lux @ (F2.0, AGC ON), 0 Lux with IR
Shutter Speed	1/3 s to 1/100,000 s
Slow Shutter	Yes
Day & Night	IR cut filter
Wide Dynamic Range	120dB
Angle Adjustment	Pan: 0° to 360°, tilt: 0° to 75°, rotate: 0° to 360°
Lens	
Lens Type	Fixed lens, 1.68 mm
Aperture	F2.0
FOV	1.68 mm, horizontal FOV: 180° , vertical FOV: 101° , diagonal FOV: 180°
Lens Mount	M12

SPECIFICATIONS

Illuminator	
IR Range	Up to 10 m
Wavelength	850nm
Video	
Max. Resolution	2688 × 1520
Main Stream	50Hz: 25fps (2688 × 1520, 2304 × 1296, 1920 × 1080, 1280 × 720) 60Hz: 24fps (2688 × 1520), 30fps (2304 × 1296, 1920 × 1080, 1280 × 720)
Sub Stream	50Hz: 25fps (2688 × 1520, 2304 × 1296, 1920 × 1080, 1280 × 720) 60Hz: 24fps (2688 × 1520), 30fps (2304 × 1296, 1920 × 1080, 1280 × 720)
Video Compression	Main stream: H.265+/H.264+/H.265/H.264 Sub-stream: H.265/H.264/MJPEG
H.264 Type	Main Profile/High Profile
H.265 Type	Main Profile
Video Bit Rate	32 Kbps to 16 Mbps
Scalable Video Coding (SVC)	H.264 and H.265 encoding support
Smart Feature-set	
Smart Event	Line crossing detection, intrusion detection, unattended baggage detection, object removal detection, face detection, scene change detection
Basic Event	Motion detection, video tampering alarm, exception (network disconnected, IP address conflict, illegal login, HDD full, HDD error)
Linkage Method	Upload to FTP/NAS/memory card, notify surveillance center, send email, trigger recording, trigger capture
Region of Interest	1 fixed region for main stream and sub-stream
Image	
Image Enhancement	BLC, HLC, 3D DNR
Image Setting	Saturation, brightness, contrast, sharpness, AGC and white balance adjustable by client software or web browser
Day/Night Switch	Day/Night/Auto/Schedule
Network	
Network Storage	microSD/SDHC/SDXC card (256 GB), local storage and NAS (NFS,SMB/CIFS), ANR
Protocols	TCP/IP, ICMP, HTTP, HTTPS, FTP, DHCP, DNS, DDNS, RTP, RTSP, PPPoE, NTP, UPnP, SMTP, SNMP, IGMP, 802.1X, QoS, IPv6, UDP, Bonjour, SSL/TLS
API	ONVIF (PROFILE S, PROFILE G), ISAPI, SDK
Security	Password protection, complicated password, HTTPS encryption, 802.1X authentication (EAP-TLS 1.2, EAP-LEAP, EAP-MD5), watermark, IP address filter, basic and digest authentication for HTTP/HTTPS, WSSE and digest authentication for ONVIF, TLS1.2
Simultaneous Live View	Up to 6 channels
User/Host	Up to 32 users 3 levels: Administrator, Operator and User
Client	Horus VMS and app
Web Browser	Plug-in free live view: Chrome 45.0+, Firefox 52.0+ Local Service: Chrome 41.0+, Firefox 30.0+

SPECIFICATIONS

Interface	
Communication interface	1 RJ45 10M/100M self-adaptive Ethernet port
On-board storage	Built-in micro SD/SDHC/SDXC slot, up to 256 GB
General	
Web Client Language	32 languages English, Russian, Estonian, Bulgarian, Hungarian, Greek, German, Italian, Czech, Slovak, French, Polish, Dutch, Portuguese, Spanish, Romanian, Danish, Swedish, Norwegian, Finnish, Croatian, Slovenian, Serbian, Turkish, Korean, Traditional Chinese, Thai, Vietnamese, Japanese, Latvian, Lithuanian, Portuguese (Brazil)
General Function	Anti-flicker, three streams, heartbeat, mirror, privacy masks, password reset via e-mail, pixel counter
Reset	Reset via reset button on camera body, web browser and client software
Startup and Operating Conditions	-10 °C to 40 °C (14 °F to 104 °F), humidity 95% or less (non-condensing)
Storage Conditions	-10 °C to 40 °C (14 °F to 104 °F), humidity 95% or less (non-condensing)
Power Supply	12 VDC ± 25%, φ 5.5 mm coaxial power plug; reverse polarity protection; PoE (802.3af, type 1, class 3)
Power Consumption and Current	12 VDC, 0.48 A, max. 5.8 W; PoE (802.3af, 36 V to 57 V), 0.19 A to 0.12 A, max. 6.8W
Material	Metal & Plastic
Dimensions	Camera: φ 127.3 × 104.1 mm (φ 5" × 4.1") With package: 150 × 150 × 141 mm (5.9" × 5.9" × 5.6")
Weight	Camera: Approx. 520 g (1.1 lb.) With package: Approx. 700 g (1.5 lb.)
Approval	
EMC	47 CFR Part 15, Subpart B; EN 55032: 2015, EN 61000-3-2: 2014, EN 61000-3-3: 2013, EN 50130-4: 2011 +A1: 2014; AS/NZS CISPR 32: 2015; ICES-003: Issue 6, 2016; KN 32: 2015, KN 35: 2015
Safety	UL 60950-1, IEC 60950-1:2005 + Am 1:2009 + Am 2:2013, EN 60950-1:2005 + Am 1:2009 + Am 2:2013, IS 13252(Part 1):2010+A1:2013+A2:2015, IEC/EN 60950-1
Chemistry	2011/65/EU, 2012/19/EU, Regulation (EC) No 1907/2006

* Listed resolutions are only selectable options. It does not mean that all streams can work at their maximum resolution at the same time.

DIMENSIONS

Ø 127.3(5")
3×Ø 4.8(0.2")
Ø 112.4(4.4")

104.1(4.1")

120°

Unit: mm(inch)

ACCESSORIES

DS-1280ZJ-DM8 junction box