



P/N: A.007376

**CAMERA EMOS EX 90° ETHERNET**

P/N: A.007377

**CAMERA EMOS EX 60° ETHERNET**

P/N: A.007378

**CAMERA EMOS EX 30° ETHERNET**

Description			
	A.007376	A.007377	A.007378
Lens specified	90°	60°	30°
Horizontal lens angle	90°	60°	30°
Vertical lens angle	68°	45°	22°
Sensor element	High resolution 1/3" CMOS rolling shutter, 1280H x 960V		
Video image	60fps at 720p SDR, 45fps at 960p SDR image processing and 56fps at 720p HDR, 43fps at 960p HDR image processing		
Protocols	RTP (MJPEG RFC2435 and h.264 RFC6184) over UDP, PTP and gPTP, ISO17215-2014, IEEE1722 (AVB), ARP		
IP address	DHCPv4 or static IPv4 (IPv6 possible)		
Latency	<100ms depending on hardware processing platform (50ms demonstrated on Orlaco hardware)		
Light sensitivity	responsivity 5,5V/lux-sec, Low light feature (<0,1Lux)		
High dynamic range	>115dB		
Compression	MJPEG, H.264 (High 10 intra profile encoding)		
Interface	100Mb/s (Fast Ethernet)		
Image processing	Color and gamma correction, 3D noise correction, edge enhancement, digital WDR, advanced contrast enhancement, auto white-balance, auto exposure control, mirroring, flipping, photometric and geometric lens distortion correction.		

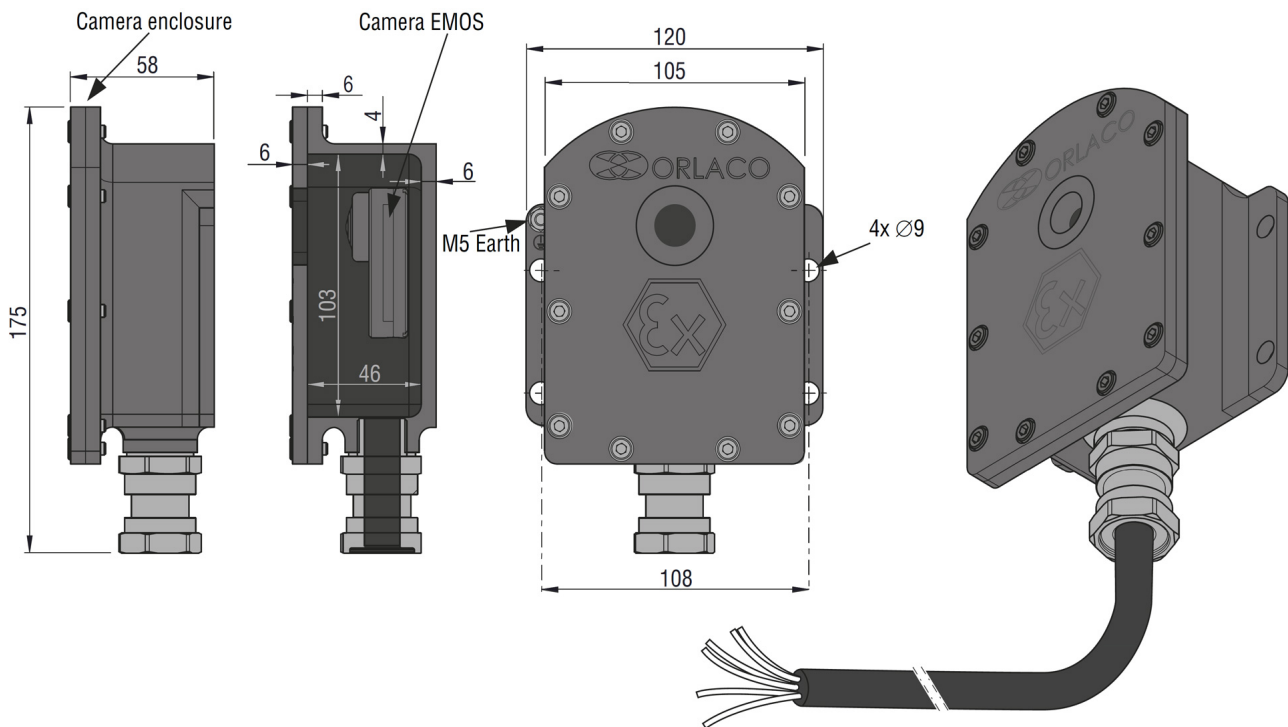
Electrical	
Power input	12/24V/DC. Below 7V: camera is non-functional. Above 33V the overvoltage protection is activated. This overvoltage protection is deactivated below 30V. Powercircuit is protected up to 80V/DC. Outputs are Short Circuit Protected. In all these above mentioned values; a tolerance of +/-10% is applied.
Power consumption	<2W
Transient protection	Camera may be powered directly from 12V or 24V battery without additional electrical protection since camera has an integrated circuit that protects the camera against over- and undervoltage, spikes, ripples and load dumps (ISO-Pulses).
Cable	Cable length 5m, open wires, 6 wire: 2x twisted pair for data and 2 wires for power supply.

### Mechanical

Housing Ex enclosure	Material Stainless steel 316
Filling	Camera is potted with automotive potting resin
Ingress protection	IP66 / IP67
Shock constancy	Shock and vibration resistant for usage on trucks, cranes, fork-lifts, maritime applications, machinery.
Truck use	Withstand all fluids and materials used in and around trucks like: ammonia solution 5%, ethanol 80-100%, isopropanol 5-10%, soapy water (min. 50% soap per volume), alkaline degreasing compounds(used in high pressure washing equipment).

### Certification

Approvals	<p><b>Suitable for use in Ex zone 21/22 and 1/2</b>          Atex, directive 2014/34/EUd          IEC 60079-0:2011, EN 60079-0:2012/+A11: 2013          IEC/EN 60079-1: 2014,          EN 13309          ISO 13766          EN ISO 14982          FCC          UNECE R10</p> <p>Ex-Code          Ex db IIC T6 Gb, Tamb: -40°C + 70°C          Ex tb IIIC T 85°C Db</p> <p>Entries Ex d glands only</p>
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### Description of camera pigtail

The Emos IP Camera has a standard pigtail.  
 The pigtail characteristics are mentioned below

### Design & Materials of camera pigtail

A1 Conductor	Bare copper, twisted pair, 2 x AWG26, 19 x 0,10mm. Color: Orange, Orange/White, .
B1 Conductor	Bare copper, twisted pair, 2 x AWG26, 19 x 0,10mm. Color: Green, Green/White.
C1 Conductor	Bare copper, straight, 2 x AWG20, 19 x 0,20mm. Color: Black, Red.
Jacket	PUR, overall diameter 6,8mm +/-0,2mm, Color: Black RAL 9005.
Shield	Tinned copper, braided 85%.
Temperature Range	-40°...+85°C
Approvals	Flame resistance acc. IEC 60332-2; Oil resistance acc. EN50363-10; Halogen free acc. IEC 60754-1, EN50237-2-1, VDE 0472-815; RoHS compliance acc. 2006/95/CE, 2004/108/CE, 2011/65/CE; UV resistance acc. UL1581 300h.
Minimal Bending Radius	7,5 x diameter.

