COEX™ C3000-1C Ex d Camera Station

The COEX™ C3000-1C camera series has a unique compact and lightweight design specifically developed for hazardous area applications. The camera stations are designed for toughness and durability to operate in the most adverse environments – from offshore oil and natural gas rigs to FPSO / FSO's and LPG / LNG tanker vessels



The COEX[™] C3000 Ex d camera stations are manufactured from high grade, corrosion resistant, electro-polished 316 stainless steel – incorporating state of the art cameras, control and transmission modules.

The advanced mechanical design of a virtually indestructible gearbox combined with backlash eliminating technology ensures smooth proportional speed control at fast and slow speeds. Preset accuracy and repeatability of <0.05° provides a reliable solution for both security and process monitoring.

The COEX™ C3000 camera stations can operate in the most extreme environments and are certified for temperatures as low as -55°C (utilizing the unique "Pre-Heat" mode), to desert conditions of +60°C ambient temperature.

Features

- ATEX Certification
- CSAus Certification
- IECEx Certification
- CSA Canadian Certification
- DNV Type Approval
- IP66 & IP68 Rated Completely Protected Against Dust & Water Ingress, for the Most Demanding Environment
- Type 6 Enclosure
- C-Tick Compliance
- Electro-polished 316 Stainless Steel, for Optimum Corrosion Resistance
- Low Voltage Operation
- Pre-Heat Mode
- Continuous Rotation

- AC Stepper Motor Drive for Variable Speed Control with High Preset Accuracy and Repeatability
- Onscreen Menu Display Allowing Easy Configuration and Diagnostics
- Single Stationary Cable Tail
- Multi-protocol Telemetry for Extensive System Compatibility

Options

- Integrated IP
- Integral Wiper [W]
- COEX[™] 'FEWS' Ex Pressurized Wash System
- Integral Fiber Optic Transmission with Alternative Base
- Thermal Imaging



Specifications

CERTIFICATIONS / RATINGS [OPTIONS]

> ATEX / IECEx: ATEX II 2GD, Ex d IIC Gb; Ex tb IIIC Db; T4 / T5 / T6 US Class / Division: Class I, Div 1, Groups A, B, C, D; Class II, Div I, Groups E, F, G; T4 / T5 / T6 US Class / Zone: Class I, Zone 1, AEx d IIC Gb; Zone 21, AEx tb IIIC Db; T4 / T5 / T6 CAN: Ex d IIC Gb; Ex tb IIIC Db; Class II, Div 1, Groups E, F, G, Class III, Div 1; T4 / T5 / T6 DNV Type Approval

Certifications / Ratings

EMC:61000 **CE Compliant**

IP66 & IP68 (30m Submersion for 4 hrs) to IEC 60529

Type 6 Enclosure C-Tick Compliant

ENVIRONMENTAL

Rated Temperature -55°C to +60°C

MECHANICAL		
Material	Electro-polished 316 Stainless Steel	
Window	Toughened Glass, Thermostatically Operated Demister [Wiper]	
Pan Operation	Continuous Rotation; 0° to 42°/sec; Programmable soft-stops; preset positioning	
Tilt Operation	180° Rotation; 0° to 21°/sec; Mechanical limits; programmable soft-stops; preset positioning	
Mounting	4 x M8 tapped holes, equispaced on a 4" (101.6 mm) P.C.D.	
Dimensions (W x D x H)	375 x 310 x 352 mm [Alternative Base 375 x 310 x 363 mm]	
Pan Turning Circle	Ø 560 mm	
Weight*1	25 kg [Alternative Base 27 kg]	

ELECTRICAL	
Power Requirements	24Vac 50 / 60Hz or 24Vdc (±10%)
Power Consumption	75VA Maximum

TELEMETRY		
Interface	RS485 serial asynchronous data	
Protocols*2	Synectics™, Pelco®, and other industry standard protocols available	
Functions*1	Pan, Tilt, Zoom, Focus, Wipe, Wash, Aux1, [Aux2] and Aux In	
Day / Night Camera Functions*1	Optical Zoom, Digital Zoom, BLC, Autofocus, Focus, Color / Mono, Iris, Auto Iris, Frame Integration, White Balance	
OSD	Password protected on-screen menu system for camera station configuration and diagnostics	

CAMERA / LENS	C3000-1C36 [W]	C3000-1C10 [W]	
Video Output	1.0 Vpk-pk CVBS into 75Ω Color PAL 50Hz [NTSC 60Hz]		
Image Sensor	1/4" EXview HAD CCD	1/3" Super HAD CCD II	
Resolution	>550TVL	>530TVL	
S/N Ratio	>50dB		
Zoom Range	36x zoom (up to 432x with digital zoom)	10x zoom (up to 120x with digital zoom)	
Minimum Illumination	1.4 lux 0.1 lux (with ½ sec integration) 0.01 lux mono (with ½ sec integration)	0.25 lux 0.015 lux (with $\frac{1}{2}$ sec integration) 0.0004 lux mono (with $\frac{1}{2}$ sec integration)	
Focal Length	3.4 to 122.4 mm	5.1 to 51 mm	
Angle of View (H)	57.8° to 1.7°	52° to 5.4°	
Aperture	F1.6 to 4.5	F1.8 to 2.1	

NOTE: *1 Dependant on equipment fitted. *2 Refer to Synectics for availability and compatibility with other control systems.

Synectic Systems

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