

# COEX™ C3000-1S Ex d Camera Station

The COEX™ C3000-1S 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 <math><0.05^\circ</math> 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

## 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
- AC Stepper Motor Drive for Dual 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 Encoder
- Integral Wiper [W]
- COEX™ 'FEWS' Ex Pressurised Wash System
- Integral Fibre Optic Transmission with Alternative Base

# Specifications

CERTIFICATIONS / RATINGS		[OPTIONS]	
Certifications / Ratings	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 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	360° Rotation; 0° to 9°/sec; Mechanical limits; programmable soft-stops; preset positioning (18°/sec)		
Tilt Operation	180° Rotation; 0° to 4.5°/sec; Mechanical limits; programmable soft-stops; preset positioning (9°/sec)		
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, Wipe, Wash, Aux1 [Aux2] and Aux In		
Day / Night Camera Functions*1	Optical Zoom, Digital Zoom, BLC, Autofocus, Focus, Colour / Mono, Iris, Auto Iris, Frame Integration, White Balance		
OSD	Password protected on-screen menu system for camera station configuration and diagnostics		
CAMERA/LENS		C3000-1S18 [W]	C3000-1S10 [W]
Video Output	1.0 Vpk-pk CVBS into 75Ω Colour PAL 50Hz [NTSC 60Hz]		
Image Sensor	¼" EXview HAD CCD	⅓" Super HAD CCD II	
Resolution	>550TVL	>530TVL	
S/N Ratio	>50dB		
Zoom Range	18x zoom (up to 216x with digital zoom)	10x zoom (up to 120x with digital zoom)	
Minimum Illumination	0.7 lux 0.07 lux (with ⅓ sec integration) 0.01 lux mono (with ⅓ sec integration)	0.25 lux 0.015 lux (with ⅓ sec integration) 0.0004 lux mono (with ⅓ sec integration)	
Fixed Focal Length	4.1 to 73.8 mm	5.1 to 51 mm	
Angle of View (H)	48° to 2.8°	52° to 5.4°	
Aperture	F1.4 to 3.0	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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Specifications subject to change. E & OE.

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MANUFACTURER OF



CAMERA STATIONS

Reference Number:  
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