

# COEX™ C3000-1V HD IP Camera Station

The COEX™ C3000-1V HD IP camera station has a unique compact and light-weight 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 C3000 HD IP incorporates a 1080P HD video camera module with 30x optical zoom for outstanding image quality. The unit is designed to stream video in ambient temperatures of up to +70°C.

Fully controllable via Synergy, configurable and upgradable through an in-built web interface providing remote access to maintenance staff and operators to ensure optimum operability and reliability.

Preset accuracy and repeatability of <math><0.05^\circ</math> ensures smooth proportional speed control at fast and slow speeds.

The COEX™ C3000 camera stations can operate in the most extreme environments and are certified for temperatures as low as -55°C (utilising the unique "Pre-Heat" mode), to desert conditions of +70°C ambient temperature.

## Features

- ATEX Certification
- CSAus Certification
- IECEx Certification
- CSA Canadian Certification
- EAC-TR CU Certification
- DNV Type Approval
- IP66 & IP68 Rated – Completely Protected Against Dust & Water Ingress, for the Most Demanding Environment
- Type 6 Enclosure
- Native IP H.264 Encoding
- Low Voltage Operation
- Pre-Heat Mode
- AC Stepper Motor Drive for Variable Speed Control with High Preset Accuracy and Repeatability
- In-built Web Interface Allows Easy Configuration and Diagnostics
- Single Stationary Cable Tail

## Options

- Integral Wiper [W]
- COEX™ 'FEWS' Ex Pressurised Wash System
- Integral Fibre Optic Transmission with Alternative Base
- Continuous Rotation

# 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 EMC:61000 CE Compliant IP66 & IP68 (30m Submersion for 4 hrs) to IEC 60529 Type 6 Enclosure	
ENVIRONMENTAL		
Rated Temperature	-55°C to +60°C [+70°C]	
MECHANICAL		
Material	Electro-polished 316 Stainless Steel	
Window	Toughened Glass, Thermostatically Operated Demister [Wiper*2]	
Pan Operation	360° Rotation; 0° to 42°/sec; Mechanical limits; programmable soft-stops; preset positioning [Continuous Rotation]	
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	100VA Maximum	
CAMERA / LENS		C3000-1V75 [W]
Image Sensor	1/2.8" Progressive Scan CMOS	
Signal System	HD: 1080p/29.97, 1080p/25	
Focus System	Auto, Manual, ICR-in Focus Compensation	
Exposure Control	AE Control: Auto, Manual	
Effective Pixels	Approximately 2.38 megapixels	
Electronic Shutter	1/1 to 1/10,000 sec, 22 steps	
S/N Ratio	>50dB	
Zoom Range	30x zoom Up to 12x digital zoom	
Minimum Illumination (50%, high sensitivity mode ON)	0.35 lux (shutter speed 1/30 sec) 0.05 lux (shutter speed ¼ sec, shutter speed ½ sec) ICR-ON mode: 0.013 lux (shutter speed 1/30 sec) 0.002 lux (shutter speed ¼ sec, shutter speed ½ sec, 30%) 1.4 lux (shutter speed 1/30 sec)	
Minimum Illumination (50%, high sensitivity mode OFF)	0.19 lux (shutter speed ¼ sec, shutter speed ½ sec) ICR-ON mode: 0.05 lux (shutter speed 1/30 sec)	
Iris	DC iris	
Focal Length	4.3 to 129 mm	
Aperture	F1.6 - 4.7	
Angle of View	63.7° to 2.3°	
CAMERA OPERATION		
Camera Functions	White Balance, WDR, Backlight Compensation, Digital Zoom, Day / Night IR Cut Filter	
Presets	Accuracy <0.05°, Proportional Pan & Tilt, Smart Zoom, Home Function	
Wash*1	24V switched output	

**VIDEO COMPRESSION**

Compression	Selectable H.264 AVC High Profile / Main Profile (MPEG4 part 10)
Output Streams	Dual uni-cast stream or multi-cast
Data Rate	Maximum 8Mb/s
GOP Structure	Default 25/30

**STREAMING OPTIONS**

Single Streaming Mode	H.264 1920x1080 (25/30fps)
Resolutions	Full HD 1080P / qHD / WQVGA

**NETWORK**

Interface	RJ-45, 10/100 Mbps Ethernet
Protocol	RTP/RTSP, TCP/IP, UDP, IGMP, SNMP, HTTP, NTP
Password Levels	Administrator / User
Supported Internet Browsers	Chrome / Firefox / IE version 6 or higher

NOTE: \*1 Dependant on equipment fitted. \*2 Wipers are consumable items that need regular replacement. Please refer to the manual for recommendations and maintenance.

**Synectics**

sales@synecticsglobal.com

**synecticsglobal.com**

Specifications subject to change. E & OE.

Copyright © Synectic Systems Group Limited., Synectic Systems, Inc., Synectic Systems (Asia) Pte. Limited 2018. All Rights Reserved.

MANUFACTURER OF



CAMERA STATIONS

Reference Number:

C3000-1VHDIP/0418/A4 Iss 4