# COEX™ C3000-1C HD IP Camera Station

**The COEX™ C3000-1C 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 <0.05° 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
- IP66 & IP68 Rated – Completely Protected Against Dust & Water Ingress, for the Most Demanding Environment
- Type 6 Enclosure
- Electro-polished 316 Stainless Steel, for Optimum Corrosion Resistance
- Native IP H.264 Encoding
- Low Voltage Operation
- Pre-Heat Mode
- Continuous Rotation
- 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

**SYNECTICS**

# Specifications

| CERTIFICATIONS / RATINGS | [OPTIONS] |
| --- | --- |
| Certifications / Ratings | ATEX / IECEx: ATEX II 2GD, Ex d IIC Gb; Ex tb IIIC Db; T4 / T5 / T6<br>US Class / Division: Class I, Div 1, Groups A, B, C, D; Class II, Div I, Groups E, F, G; T4 / T5 / T6<br>US Class / Zone: Class I, Zone 1, AEx d IIC Gb; Zone 21, AEx tb IIIC Db; T4 / T5 / T6<br>CAN: Ex d IIC Gb; Ex tb IIIC Db; Class II, Div 1, Groups E, F, G, Class III, Div 1; T4 / T5 / T6<br>EMC:61000<br>CE Compliant<br>IP66 & IP68 (30m Submersion for 4 hrs) to IEC 60529<br>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] |
| Pan Operation | Continuous Rotation; 0° to 42°/sec;<br>Programmable soft-stops; preset positioning |
| Tilt Operation | 180° Rotation; 0° to 21°/sec;<br>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 | C3000-1C75 [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<br>Up to 12x digital zoom |
| Minimum Illumination<br>(50%, high sensitivity mode ON) | 0.35 lux (shutter speed 1/30 sec)<br>0.05 lux (shutter speed ¼ sec, shutter speed ⅓ sec)<br><br>ICR-ON mode:<br>0.013 lux (shutter speed 1/30 sec)<br>0.002 lux (shutter speed ¼ sec, shutter speed ⅓ sec, 30%) |
| Minimum Illumination<br>(50%, high sensitivity mode OFF) | 1.4 lux (shutter speed 1/30 sec)<br>0.19 lux (shutter speed ¼ sec, shutter speed ⅓ sec)<br><br>ICR-ON mode:<br>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

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|---|---|
| Compression | Selectable H.264 AVC High Profile / Main Profile (MPEG4 part 10) |
| Output Streams | 1 uni-cast stream or multi-cast |
| Data Rate | Maximum 8Mb/s |
| GOP Structure | Default 25/30 |

## STREAMING OPTIONS

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|---|---|
| Single Streaming Mode | H.264<br>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 Refer to Synectics for availability and compatibility with other control systems.

**Synectic Systems**

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MANUFACTURER OF

OEX

CAMERA STATIONS