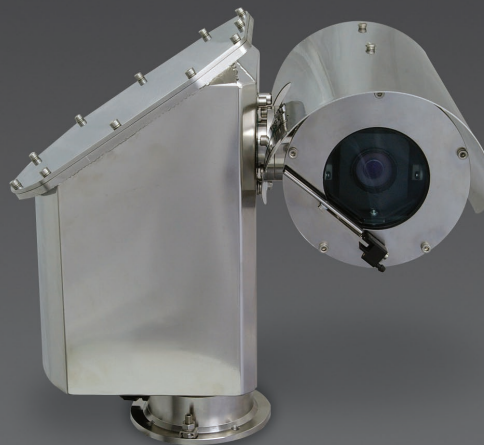


# COEX™ C2000-1C HD IP Camera Station

The COEX™ C2000-1C HD IP camera station has a unique compact and lightweight design specifically developed for marine applications. The camera stations are designed for toughness and durability to operate in the most adverse environments – from extremely low temperatures where ice is prevalent to severe weather conditions on all types of vessels to the high temperatures experienced in deserts.



The C2000 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 (158°F).

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™ C2000 camera stations can operate in the most extreme environments and are certified for temperatures as low

as -55°C (-67°F) (utilizing the unique “Pre-Heat” mode), to desert conditions of +70°C (158°F) ambient temperature.

## Features

- DNV Type Approval
- CSAus Certification
- CSA Canadian Certification
- EAC-TR CU Certification
- IP66 & IP67 Rated – Completely Protected Against Dust & Water Ingress, for the Most Demanding Environments
- Type 6 Enclosure
- Electro-polished 316L Stainless Steel, for Optimum Corrosion Resistance
- Native IP H.264 Encoding

- Continuous Rotation
- 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™ ‘MEWS’ Wash System
- Fiber Optic Available with Associated Junction Box

# Specifications

| CERTIFICATIONS / RATINGS                                 |  | [OPTIONS]      |
|--|--|----------------|
| Certifications / Ratings                                 | DNV Type Approval<br>CSAus / CSA Canadian Class 3862 13 and Class 3862 93<br>EAC-TR CU<br>EMC:61000<br>CE Compliant<br>Type 6 Enclosure<br>IP66 & IP67 to IEC 60529 Machinery Directive: 2006/42/EC<br>LVD Directive: 2006/95/EC |                |
| ENVIRONMENTAL  |  |                |
| Operating Temperature                                    | -67°F (-55°C) to 158°F (+70°C)   |                |
| MECHANICAL   |  |                |
| Material   | Electro-polished 316L Stainless Steel  |                |
| Window   | Toughened Glass, Thermostatically Operated Demister [Wiper]  |                |
| Pan Operation  | Continuous Rotation; 360° Rotation; 0° to 42°/sec;<br>Mechanical limits; 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)                                   | 14.29" x 12.21" x 13.31"   |                |
| Pan Turning Circle                                       | Ø 16.77"   |                |
| Weight*1   | 35 lbs   |                |
| ELECTRICAL   |  |                |
| Power Requirements                                       | 24Vac 50 / 60Hz or 24Vdc (±10%)  |                |
| Power Consumption  | 75VA Maximum   |                |
| CAMERA / LENS  |  | C2000-1C75 [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 ½ sec)<br>ICR-ON mode:<br>0.013 lux (shutter speed 1/30 sec)<br>0.002 lux (shutter speed ¼ sec, shutter speed ½ 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 ½ sec)<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**

|                |  |
|----------------|--|
| 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**

|                       |                                     |
|-----------------------|-------------------------------------|
| Single Streaming Mode | H.264<br>1920x1080 (25/30fps)       |
| Resolutions           | H.264 - 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**

sales@synecticsglobal.com

**synecticsglobal.com**

Specifications subject to change. E & OE.

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MANUFACTURER OF



CAMERA STATIONS

Reference Number:  
C2000-1CHDIP/0815/USL Iss 2