The COEX™ C2000 4K IP Fixed Camera Station has a unique compact and lightweight design developed specifically to meet the worldwide demand for surveillance and process monitoring of harsh industrial and marine environments.

The COEX C2000 marine camera stations are manufactured from the highest-grade, corrosion-resistant, electro-polished 316L stainless steel. They are designed for toughness and durability to operate in the most adverse environments, from freezing temperatures to the blistering heat of desert conditions.

This advanced camera station combines 4K video with a 20x optical zoom to deliver high-quality image and detail capture.

Featuring the latest encoding technology, the camera station is capable of triple-stream H.264 and H.265 encoding for simultaneous live view and recording.

The C2000 4K IP Fixed Camera Station has cybersecurity measures built-in, including encrypted video streaming, HTTPS, and 802.1x protocols.

COEX camera stations are compatible with a variety of VMS platforms through ONVIF Profile S and T compliance.

Options
- Integral wiper
- COEX MEWS5 wash systems
- IR lamp*1
## Specifications

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### ENVIRONMENTAL

- **Operating Temperature**: -45°C to +60°C [+70°F] / -49°F to +140°F [+158°F]
- **Storage Temperature**: -45°C to +80°C / -49°F to +176°F
- **Ingress Protection**: IP66 & IP67 to IEC60529, Type 6 Enclosure
- **Salt Mist**: IEC60068-2-52 & IEC60945 Section 8.12
- **Vibration**: 0.7 g to IEC60068-2-6 & IEC60945
- **Wind Loading**: Operational to 130 km/h, survival to 200 km/h

### MECHANICAL

- **Material**: Electro-polished 316L stainless steel
- **Window**: HD grade toughened glass, thermostatically operated demister [Wiper*2]
- **Mounting Orientation**: Upright or inverted
- **Mounting Base**: 1 x Ø 10.5 mm / 0.41” fixing hole
- **Dimensions (W x D x H)**: 166 x 310 x 230 mm / 6.54” x 12.21” x 9.06”
- **Weight**: 5 kg / 11 lbs
- **Cable Gland Entries**: 1 x M20

### ELECTRICAL

- **Input Power Options**: 24 V AC/DC (+10%) 50/60 Hz
- **Power Consumption**:
  - 8 VA Quiescent
  - 11 VA Operating
  - 24 VA Operating (with heater)
  - 27 VA Max
- **Wash Control**:
  - Volt free switched output (24 V 0.75 A max)
- **Auxiliary Inputs**:
  - 1 x contact closure input (5 V pull up) [up to 4 available on request]
- **Relay Outputs**:
  - 1 x volt free switched output [24 V 0.75 A max] [up to 2 available on request]
- **Audio**:
  - [Line Input]

### CAMERA OPERATION

- **Preset Memory**: 128 user programmable preset positions (zoom, focus)
- **Wash/Wipe**:
  - [Optional wash/wipe with auto-wiper off]
- **ONVIF Control Features**:
  - Zoom and focus control, preset store/recall, auxiliary controls (wash/wipe/lamps/auto focus), wash/wipe and lamps control mappable to ONVIF presets for control systems that have no support for auxiliary commands, alarm inputs, and relay outputs
- **IR Lamp Control**:
  - Manual/auto control of a connected IR lamp
- **IR Focus Compensation**:
  - Manual/auto control of IR focus compensation and automatic compensation of focus preset positions
**DAY/NIGHT CAMERA / LENS**

- **Image Sensor**: 1/2.5 Exmor-R CMOS sensor
- **Signal System**: 4K 2160p 25/29.97 FPS
  - FHD 1080p 25/29.97/50/59.94 FPS
- **Effective Pixels**: 8.51 mega pixels
- **Zoom Range**: 20x zoom (up to 240x with digital zoom)
- **Focal Length/Aperture**: 4.4 mm (wide) to 88 mm (tele), F2.0 to F3.8
- **Angle of View (H)**: 70.2° (wide) to 4.1° (tele), 60° (wide) to 3.5° (tele) with image stabilizer on
- **Minimum Illumination** (ISO12232, High Sensitivity Mode):
  - 0.4 lux (1/30 s)
  - 0.06 lux (1/4 s, 1/3 s)
- **Minimum Illumination** (ISO(RE)):
  - 1.6 lux (1/30 s)
  - 0.21 lux (1/4 s, 1/3 s)
- **Electronic Shutter**: Auto (1/1 to 1/10 000 s, 28 steps)
- **Signal/Noise Ratio**: >50 db (weight on)
- **Features**: Digital zoom on/off, auto/manual focus, auto/manual iris, auto/manual IR cut filter remove (ICR), auto exposure (AE), automatic gain control (AGC), auto white balance (AWB), backlight compensation (BLC), auto slow shutter, visibility enhancer (VE), defog, highlight compensation (HLC), Noise Reduction (NR)
- **Image Stabilization**: EIS

**VIDEO ENCODING**

- **Compression Standards**: H.264 (MPEG4 part 10/AVC) high, main, base profiles
- **Bitrate Mode**: Constant Bitrate (CBR), Variable Bitrate (VBR)
- **Encoding Capability**: Up to 3 independently configurable encoded video streams
- **Stream Bitrate**: 100 kb/s to 12 Mbits/s
- **Image Resolution**: 4K (3840 x 2160), Full HD 1080p (1920 x 1080), 720p (1280 x 720), D1 (720 x 576/480), 4CIF (704 x 576), CIF (352 x 288)
- **Image Rate**: Full, half, quarter, sixth
- **GOP Structure**: I-frame only, 5 to 240 frames
- **Region of Interest (ROI)**: Configurable per encoded video stream, ability to crop a selected area of the image source for encoding (variable resolution and aspect ratio)

**AUDIO ENCODING**

- **Compression Standards**: ARM AACLC, ARM AACLC MPEG2, ARM AACHE, ARM AACHE V2
- **Sample Rate**: 48 kHz, 44.1 kHz, 32 kHz, 16 kHz
- **Stream Bitrate**: 12 to 384 kb/s (AACHE and AACHE V2 32 to 64 kb/s)

**NETWORK DEVICE**

- **Interface Options**: Ethernet (100Base-T, 10-Base-T), Auto/full/half duplex, Auto/10/100, Configurable MTU Size
- **Protocols**: TCP/IP, UDP, ICMP, DHCP, DNS, HTTP, HTTPS, NTP, RTSP/RTP/RTCP, TSRT, RTMP, RTMPS, SRT, IGMP, SNMP,
  - SYNS, SSL, TLS, 802.1x (EAP)
- **Control Protocol**: SYNS, ONVIF (Profile S, T compliant)
- **Video Stream Delivery**: RTSP/RTP (Unicast: UDP/TCP, Multicast UDP), TSRT, RTMP, RTMPS, SRT
- **Network Discovery**: SYNS, WS-Discovery (ONVIF)
- **Device Security**: Multiple users and 7 access levels protecting access to the web interface, ONVIF and RTSP services, HTTPS support, HTTP disable, 802.1x (EAP), video streaming disabled until change of default password, unicast stream disable
- **Supported Internet Browsers**: Chrome/Firefox/IE/Edge (No Active-X browser components required)
- **System Maintenance**: Field upgradeable firmware, diagnostic logs

Hardware system supervisor providing temperature management, cold-start, auto-shutdown and watchdog control

**NOTE**: *1 Dependent on certification and equipment fitted. *2 Wipers are consumable items that need regular replacement. Please refer to the manual for recommendations and maintenance. *3 Dependent on cable tail option. *4 Maximum permissible resolution, bitrate and framerate per additional stream will be reduced dependent on the configuration of the primary stream. *5 Exact certification requirements must be specified at the time of order.