COEX™ C3000 HD IP PTZ Camera Station

The COEX™ C3000 HD IP PTZ Camera Station has a unique compact and lightweight design developed specifically for hazardous-area applications. C3000 camera stations are designed for both toughness and durability as demanded for operation in the most adverse of environments.

The COEX C3000 hazardous-area camera stations are manufactured from the highest-grade, corrosion-resistant, electro-polished 316L stainless steel. Designed for toughness and durability to operate in the most extreme environments, they are certified for temperatures from -55°C to +70°C ambient temperature.

This premium-performance camera station combines 1080p HD video with 30x optical zoom to provide outstanding image quality under a wide range of environmental and lighting conditions.

Incorporating high-efficiency encoding technology, the camera station is capable of dual-stream H.264 encoding for simultaneous live view and recording.

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

Options
- Integral wiper
- COEX FEWS3 wash systems
- IR lamp
- Continuous rotation

SYNECTICS
Specifications

CERTIFICATIONS / RATINGS

ATEX / IECEx
ATEX II 2GD, Ex db IIIC Gb; Ex tb IIIC Db; T4 / T5 / T6
EN60079-0, EN60079-1, EN60079-28, EN60079-31,
IEC60079-0, IEC60079-1, IEC60079-28, IEC60079-31

ATEX / IECEx Certified Temperature
-55°C to +40°C (T6), +50/60°C (T5), +70°C (T4)

CSAus Class / Division
Class I, Div 1, Groups A, B, C, D; Class II, Div 1, Groups E, F, G; T4 / T5 / T6

CSAus Class / Zone
Class I, Zone 1, AEx d IIC Gb; Zone 21, AEx tb IIC Db; T4 / T5 / T6

CSAus Certified Temperature
-55°C to +40°C (T6), +50/60°C (T5), +70°C (T4)

CSA Certified Temperature
-55°C to +40°C (T6), +50/60°C (T5), +70°C (T4)

CSA Class / Division
Ex d IIC Gb; Ex tb IIIC Db; Class II, Div 1; T4 / T5 / T6

CSA Standards
FM3600, FM3615, FM3616, UL50, UL50E, UL60950-1

CSA Certified Temperature
-55°C to +40°C (T6), +50/60°C (T5), +70°C (T4)

ENC (US & Can.)
FCC CFR47 Part 15 Class A

ICES-003 Class A

EMC
IEC60950-1, IEC60825-1

DNV
A-13470

C-TICK
On Request

ENVIRONMENTAL

Operating Temperature
-45°C to +70°C (-49°F to +158°F)

Storage Temperature
-45°C to +70°C (-49°F to +158°F)

Ingress Protection
IP66 & IP68 (30m Submersion for 4 hrs) 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]

Pan Turning Circle
Ø 560 mm / 22.05"

Tilt Turning Circle
Ø 360 mm / 14.17"

Mounting Orientation
Upright or inverted

Mounting Base
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 / 14.76" x 12.21" x 13.86"

Weight
27 kg / 99.5 lbs

Cable Gland Entries
2 x M20

ELECTRICAL

Input Power Options
24 V AC/DC (±10%) 50/60 Hz

Power Consumption
9 VA Quiescent

Power Consumption (with heater)
81 VA Operating

100 VA Max

Wash Control
24 V AC/DC (0.75 A max) switched output

Auxiliary Inputs
1 x contact closure input (5 V pull up) [additional inputs available on request]

Relay Outputs
1 x 24 V AC/DC (0.75 A max) switched output [up to 2 available on request]

CAMERA OPERATION

Continuous Rotation

Pan Operation
0° to 42°/sec, mechanical limits

Programmable soft-stops, preset positioning

Tilt Operation
180° Rotation, 0° to 21′/sec, mechanical limits, programmable soft stops, preset positioning

Preset Memory
128 user programmable preset positions (pan, tilt, zoom and focus), preset accuracy <0.05°, absolute positioning, return to home function

PTZ Features
Proportional pan and tilt control in relation to zoom depth, intelligent focus/iris, smart zoom

Wash/Wipe
[Optional wash/wipe with auto-wiper off]

ONVIF Control Features
PTZ control (continuous, relative and absolute), focus control, preset store/recall, auxiliary controls (wash/wipe/ lamps/auto focus/ICR/IR compensation), wash/wipe and lamps control mappable to ONVIF presets for control systems that have no support for auxiliary commands

Motion Detection
Configurable sensitivity

Alarm Automation
Advanced rules engine with preset recall, alarm and video profile change actions

PTZ, wiper activity status

IR Lamp Control
Manual/auto control of a connected IR lamp, lamp operation automatically synchronized with the day/night camera low light detection and IR cut filter

IR Focus Compensation
Manual/auto control of IR focus compensation and automatic compensation of focus preset positions
## DAY/NIGHT CAMERA / LENS

<table>
<thead>
<tr>
<th>Specification</th>
<th>C3000-1V75 [W]</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Image Sensor</strong></td>
<td>1/2.8” Progressive scan Exmor CMOS sensor</td>
</tr>
<tr>
<td><strong>Signal System</strong></td>
<td>1080p 25/30 FPS</td>
</tr>
<tr>
<td><strong>Effective Pixels</strong></td>
<td>Approximately 2.13 megapixels</td>
</tr>
<tr>
<td><strong>Zoom Range</strong></td>
<td>30x zoom (up to 360x with digital zoom)</td>
</tr>
<tr>
<td><strong>Focal Length/Aperture</strong></td>
<td>4.3 mm (wide) to 129 mm (tele), F1.6 to F4.7</td>
</tr>
<tr>
<td><strong>Angle of View (H)</strong></td>
<td>63.7° (wide) to 2.3° (tele)</td>
</tr>
<tr>
<td><strong>Minimum Illumination (50IRE, ICR OFF)</strong></td>
<td>0.1 lux (1/50 s, Slow Shutter Off, High Sensitivity Off), 0.01 lux (1/30 s, Slow Shutter Off, High Sensitivity On)</td>
</tr>
<tr>
<td><strong>Minimum Illumination (50IRE, ICR ON)</strong></td>
<td>0.006 lux (Slow Shutter Off, High Sensitivity Off), 0.00012 lux (Slow Shutter 1/4 s, High Sensitivity On)</td>
</tr>
<tr>
<td><strong>Minimum Illumination (30IRE, ICR ON)</strong></td>
<td>0.0008 lux (Slow Shutter 1/4 s, High Sensitivity On)</td>
</tr>
<tr>
<td><strong>Wide Dynamic Range</strong></td>
<td>Off, 130 dB @ 1080p30</td>
</tr>
<tr>
<td><strong>Electronic Shutter</strong></td>
<td>Auto (1/1 to 1/10 000 s, 22 steps)</td>
</tr>
<tr>
<td><strong>Signal/Noise Ratio</strong></td>
<td>&gt;50 db (weight on)</td>
</tr>
<tr>
<td><strong>Features</strong></td>
<td>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, wide dynamic range (WDR), anti-shake, defog, on-screen text display (OSD), image invert</td>
</tr>
<tr>
<td><strong>Image Stabilization</strong></td>
<td>EIS</td>
</tr>
</tbody>
</table>

## VIDEO ENCODING

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Compression Standards</strong></td>
<td>H.264 (MPEG4 part 10/AVC) high, main, base profiles, MJPEG</td>
</tr>
<tr>
<td><strong>Bitrate Mode</strong></td>
<td>Constant Bitrate (CBR), Variable Bitrate (VBR)</td>
</tr>
<tr>
<td><strong>Encoding Capability</strong></td>
<td>Up to 2 independently configurable encoded video streams</td>
</tr>
<tr>
<td><strong>Stream Bitrate 4</strong></td>
<td>300 kb/s to 8 Mb/s</td>
</tr>
<tr>
<td><strong>Image Resolution</strong></td>
<td>Full HD 1080p (1920 x 1080), qHD (960 x 540), HD1080/16 (480 x 270)</td>
</tr>
<tr>
<td><strong>Image Rate</strong></td>
<td>1 to 25/30 IPS</td>
</tr>
<tr>
<td><strong>GOP Structure</strong></td>
<td>1 x I-frame/sec (IPP…PP)</td>
</tr>
</tbody>
</table>

## NETWORK

<table>
<thead>
<tr>
<th>Specification</th>
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</tr>
</thead>
<tbody>
<tr>
<td><strong>Interface Options</strong></td>
<td>Ethernet (100Base-T, 10-Base-T), Auto/full/half duplex, Auto/10/100</td>
</tr>
<tr>
<td><strong>Protocols</strong></td>
<td>TCP/IP, UDP, ICMP, DHCP, HTTP, HTTPS, NTP, RTSP/RTP/RTCP, IGMP, SNMP, SYNS, SSL, TLS</td>
</tr>
<tr>
<td><strong>Control Protocol</strong></td>
<td>SYNS, ONVIF (Profile S compliant)</td>
</tr>
<tr>
<td><strong>Video Stream Delivery</strong></td>
<td>SYNS, RTSP/RTP (Unicast: UDP/TCP/HTTP, Multicast UDP)</td>
</tr>
<tr>
<td><strong>Network Discovery</strong></td>
<td>SYNS, WS-Discovery (ONVIF)</td>
</tr>
<tr>
<td><strong>Device Security</strong></td>
<td>Password protected web interface, HTTPS support, HTTP disable, ONVIF discovery disable</td>
</tr>
<tr>
<td><strong>Supported Internet Browsers</strong></td>
<td>Chrome / Firefox / IE version 6 or higher (Requires VLC Active-X for in-browser video rendering)</td>
</tr>
<tr>
<td><strong>System Maintenance</strong></td>
<td>Field upgradeable firmware, diagnostic logs, configuration backup / restore</td>
</tr>
</tbody>
</table>

**NOTE:** *1 Dependent on 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 bitrate per stream will be reduced dependent on the number of encode sessions configured. *5 Exact certification requirements must be specified at the time of order.