The COEX™ C3000 Thermal 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, while allowing constant visual feedback in zero-light conditions.

The COEX C3000 hazardous-area 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 extreme environments and certified for temperatures from -55°C to +70°C ambient temperature.

This premium-performance camera station uses the latest thermal imaging technology to cover a wide range of specific site applications where the benefits of using thermal imaging are required.

Utilizing the advanced radiometry feature, the camera station can provide real-time temperature data and differential temperature monitoring of critical devices and applications.

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
- Continuous rotation
- Advanced radiometry
Specifications

CERTIFICATIONS / RATINGS

ATEX / IECEx
ATEX II 2GD, Ex db IIB/IIC 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°C (T5), +60/70°C (T4)

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

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

CSAus Standards
FM3600, FM3615, FM3616, UL50, UL50E, UL60950-1,
UL60079-0, UL60079-1, ANSI60079-31

CSAus Certified Temperature
-55°C to +40°C (T6), +50/65/60°C (T5), +70°C (T4)

CSA Class / Division
Ex d IIC Gb; Ex tb IIC Gb; Class II, Div I, Groups E, F, G, Class III, Div 1; T4 / T5 / T6

CSA Standards
C22.2 No. 0-10, C22.2 No. 60079-0, C22.2 No. 60079-1
C22.2 No. 60079-31, C22.2 No. 60950-1, IEC60529
C22.2 No. 94.1-07, C22.2 No. 94.2-07

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

EMC
EN61000-6-2, EN 61000-6-4, EN55022, EN55024 Class A limits

EMC (US & Can.)
FCC CFR47 Part 15 Class A
ICES-003 Class A

CE
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
Germanium window with DLC (Diamond-Like Carbon) coating and impact guard

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 / 59.5 lbs

Cable Gland Entries
2 x M20

ELECTRICAL

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

Power Consumption
9 VA Quiescent
68 VA Operating
81 VA Operating (with heater)
100 VA Max

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

Relay Outputs
2 x 24 V AC/DC (0.75 A max) switched output
**CAMERA OPERATION**

<table>
<thead>
<tr>
<th>Feature</th>
<th>362° Rotation</th>
<th>Continuous Rotation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pan Operation</td>
<td>0° to 42°/sec, mechanical limits, programmable soft-stops, preset positioning</td>
<td>0° to 42°/sec, programmable soft-stops, preset positioning</td>
</tr>
<tr>
<td>Tilt Operation</td>
<td>180° rotation, 0° to 21°/sec, mechanical limits, programmable soft stops, preset positioning</td>
<td></td>
</tr>
<tr>
<td>Preset Functions</td>
<td>128 user programmable preset positions (pan, tilt and digital zoom), preset accuracy &lt;0.05°, absolute positioning, return to home function</td>
<td></td>
</tr>
<tr>
<td>ONVIF Control Features</td>
<td>PTZ control (continuous, relative and absolute)</td>
<td>Digital zoom control</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Preset store/recall</td>
</tr>
<tr>
<td>Alarm Automation</td>
<td>Advanced rules engine with preset recall, alarm and video profile change actions</td>
<td>PTZ activity status</td>
</tr>
</tbody>
</table>

**THERMAL IMAGER**

<table>
<thead>
<tr>
<th>Model</th>
<th>T315</th>
<th>T345</th>
<th>T625</th>
<th>T650</th>
</tr>
</thead>
<tbody>
<tr>
<td>Image Sensor</td>
<td>Uncooled LWIR VOx microbolometer</td>
<td>17 μm</td>
<td>&lt;50 mK at f/1.0</td>
<td>75 - 13.5 μm</td>
</tr>
<tr>
<td>Pixel Pitch</td>
<td>336 x 256</td>
<td>640 x 512</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thermal Sensitivity</td>
<td>9 mm f/1.25</td>
<td>25 mm f/1.1</td>
<td>25 mm f/1.1</td>
<td>50 mm f/1.2</td>
</tr>
<tr>
<td>Spectral Response</td>
<td>35° x 27°</td>
<td>13° x 10°</td>
<td>25° x 20°</td>
<td>12.4° x 9.9°</td>
</tr>
<tr>
<td>Refresh Rate</td>
<td>75 Hz / 8.3 Hz [25 Hz / 30 Hz]</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Features</td>
<td>Continuous digital zoom, auto/manual gain mode (AGC), auto/manual FFC (NUC), selectable color palettes, polarity, second generation digital detail enhancement (DDE), image optimization, active contrast enhancement (ACE), information based histogram equalization (IBHEQ), smart scene optimization (SSO)</td>
<td>Advanced Radiometry</td>
<td>[When used with Synergy 3, the advanced radiometry feature provides 4 regions of interest per preset position that can be individually monitored or compared against one another for temperature threshold changes]</td>
<td></td>
</tr>
<tr>
<td>Human Detection*3</td>
<td>~285 m</td>
<td>~930 m</td>
<td>~930 m</td>
<td>~1700 m</td>
</tr>
</tbody>
</table>

**VIDEO ENCODING**

<table>
<thead>
<tr>
<th>Feature</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Compression Standards</td>
<td>H.264 (MPEG4 part 10/AVC) high, main, base profiles</td>
</tr>
<tr>
<td>Bitrate Mode</td>
<td>Constant Bitrate (CBR), Variable Bitrate (VBR)</td>
</tr>
<tr>
<td>Encoding Capability</td>
<td>Up to 2 independently configurable encoded video streams</td>
</tr>
<tr>
<td>Stream Bitrate*5</td>
<td>300 kb/s to 8 Mb/s</td>
</tr>
<tr>
<td>Image Resolution</td>
<td>D1 (720 x 576/480), 2CIF (720 x 288/240), CIF (352 x 288/240)</td>
</tr>
<tr>
<td>Image Rate</td>
<td>1 to 25/30 IPS</td>
</tr>
<tr>
<td>GOP Structure</td>
<td>1 x I-frame/sec (IPP…PP)</td>
</tr>
</tbody>
</table>

**NETWORK**

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

**NOTE:** *1 Dependent on equipment fitted. *2 Dependent on cable tail option. *3 Based on Johnson criteria and best conditions. *4 Human detection values shown are nominal values and should be used as estimates only. Exact human detection calculations depend on a wide variety of environmental conditions, video encoding parameters and type of monitor or display used. *5 Maximum permissible bitrate per stream will be reduced dependent on the number of encode sessions configured. *6 Exact certification requirements must be specified at the time of order.