

COEX™ C3000-1VT Ex d Camera Station

The COEX™ C3000-1VT camera series has a unique compact and lightweight design specifically developed for hazardous area applications. Combined with the latest thermal imaging technology the C3000-1VT ensures constant visual feedback in zero visible light and adverse weather conditions.



COEX™ C3000 Ex d camera stations are manufactured from high grade, corrosion resistant, electro-polished 316 stainless steel – incorporating state of the art cameras, control and transmission modules.

The advanced mechanical design of a virtually indestructible gearbox combined with backlash eliminating technology ensures smooth proportional speed control at fast and slow speeds. Preset accuracy and repeatability of <math><0.05^\circ</math> provides a reliable solution for both security and process monitoring.

Integrating the latest thermal imaging technology allows the C3000 camera station to comprehensively cover a wide range of site applications where standard cameras would be ineffective:

- Intruder / Perimeter Detection
- Process Monitoring / Fault Detection
- Material and Temperature Differentiation

Features

- ATEX Certification
- CSAus Certification
- IECEx Certification
- CSA Canadian Certification
- DNV Type Approval
- EAC-TR CU Certification
- IP66 & IP68 Rated – Completely Protected Against Dust & Water Ingress, for the Most Demanding Environment
- Type 6 Enclosure
- C-Tick Compliance
- Electro-polished 316 Stainless Steel, for Optimum Corrosion Resistance
- Low Voltage Operation
- Pre-Heat Mode
- AC Stepper Motor Drive for Variable Speed Control with High Preset Accuracy and Repeatability

- Onscreen Menu Display Allowing Easy Configuration and Diagnostics
- Germanium Window
- Single Stationary Cable Tail
- Multi-protocol Telemetry for Extensive System Compatibility

Options

- Integrated IP Encoder
- Integral Fibre Optic Transmission with Alternative Base
- Continuous Rotation

Specifications

CERTIFICATIONS / RATINGS		[OPTIONS]
Certifications / Ratings	ATEX / IECEx: ATEX II 2GD, Ex d IIC Gb; Ex tb IIIC Db; T4 / T5 / T6 US Class / Division: Class I, Div 1, Groups A, B, C, D; Class II, Div I, Groups E, F, G; T4 / T5 / T6 US Class / Zone: Class I, Zone 1, AEx d IIC Gb; Zone 21, AEx tb IIIC Db; T4 / T5 / T6 CAN: Ex d IIC Gb; Ex tb IIIC Db; Class II, Div 1, Groups E, F, G, Class III, Div 1; T4 / T5 / T6 EAC-TR CU DNV Type Approval EMC:61000 CE Compliant IP66 & IP68 (30m Submersion for 4 hrs) to IEC 60529 Type 6 Enclosure C-Tick Compliant	

ENVIRONMENTAL	
Rated Temperature	-55°C (-67°F) to +60°C (140°F) [+70°C / 158°F]

MECHANICAL	
Material	Electro-polished 316 Stainless Steel
Window	Germanium Window, Thermostatically Operated Demister
Pan Operation	360° Rotation; 0° to 42°/sec; Mechanical Limits; Programmable Soft-stops; Preset Positioning [Continuous Rotation]
Tilt Operation	180° Rotation; 0° to 21°/sec; 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] 14.76" x 12.20" x 13.86" [Alternative Base 14.76" x 12.20" x 14.29"]
Pan Turning Circle	Ø 560 mm / 22.05"
Weight*1	25 kg [Alternative Base 27 kg] / 55 lb [Alternative Base 59.5 lb]

ELECTRICAL	
Power Requirements	24Vac 50 / 60Hz or 24Vdc (±10%)
Power Consumption	75VA Maximum

TELEMETRY	
Interface	RS485 serial asynchronous data
Protocols*2	Synectics™, Pelco® and other industry standard protocols available
Functions*1	Pan, Tilt, Zoom, Aux1, [Aux2] and Aux in
Thermal Camera Functions*1	3 step digital zoom (2x, 4x, 8x), Multiple Colour Palettes (including Inverted), Cross Hair Temperature Display, Auto / Manual Shuttering
OSD	Password protected on-screen menu system for camera station configuration and diagnostics

CAMERA / LENS	C3000-1VT345	C3000-1VT315	C3000-1VT650	C3000-1VT625
Image Sensor	Uncooled VOx Microbolometer			
Spectral Response	8 – 14 µm			
Refresh Rate	<9Hz [25Hz]			
Thermal Sensitivity	>50mK			
Resolution	324 x 256		640 x 512	
Fixed Focal Length	35 mm	13 mm	50 mm	25 mm
Angle of View (H)	13° x 10°	34° x 26°	12.4° x 9.9°	25° x 20°
Human Detection*3/4	~1000 m / ~1093 yd	~200 m / ~218 yd	~1100 m / ~1202 yd	~560 m / ~612 yd

NOTE: *1 Dependant on equipment fitted. *2 Refer to Synectics for availability and compatibility with other control systems. *3 Based on Johnson Criteria. *4 Actual range may vary depending on camera set-up, user experience, environmental conditions and type of monitor or display used.

Synectics

sales@synecticsglobal.com

synecticsglobal.com

Specifications subject to change. E & OE.

Copyright © Synectic Systems Group Limited, Synectic Systems, Inc., Synectic Systems (Asia) Pte. Limited 2018. All Rights Reserved.

MANUFACTURER OF

 CAMERA STATIONS

Reference Number:
 C3000-1VT/0418/A4 Iss 9