

# COEX™ C2000 TriMode Series '3' Camera Station

The COEX™ C2000 TriMode camera station 3 series has been specifically developed for marine applications and demanding environments. Combining the latest thermal imaging technology with a day / night (colour / mono) camera module the C2000 TriMode camera stations ensure unprecedented visual feedback in all light conditions.



Utilised around the world to assist with:

- Navigation during night time and foggy conditions
- Ice Detection
- Piracy Detection
- Man-overboard Safety
- Environmental Protection
- Intruder Detection
- Safety and Security Protection

Even during daylight the C2000 TriMode can provide increased visibility over conventional camera stations with human detection at over 1100 m<sup>\*3/4</sup>

COEX Series 3 camera stations are fitted with a 324 x 256 analogue thermal imaging camera and a high resolution analogue day / night camera with removable IR cut filter.

## Features

- CSAus Certification
- CSA Canadian Certification
- EAC-TR CU Certification
- IP66 & IP67 rated – completely protected against dust & water ingress, for the most extreme environments
- Electro-polished 316L stainless steel, for maximum corrosion resistance
- TriMode Operation – Day (colour), Night (mono) and Thermal Imaging
- Low Voltage Operation
- Preset accuracy and repeatability of <0.05°
- Pre-Heat Mode for safe start up in freezing conditions
- Smart Move Technology assists target acquisition and tracking

## Options

- Continuous Rotation [C]
- Absolute Positioning
- Integral Wiper [W]
- COEX™ "MEWS" Pressurised Wash System
- Synectics IP and Fibre Optic Transmission (via associated junction box)
- COEX™ Wall Mount Bracket
- COEX™ Range of Tilt Down Towers and accessories

# Specifications

CERTIFICATIONS / RATINGS		[OPTIONS]
Certifications / Ratings	CSAus / CSA Canadian Class 3862 13 and Class 3862 93 EAC-TR CU Certified IP66 & IP67 to IEC 60529 CE Compliant to EMC and Low Voltage Directives LVD Directive: 2006/95/EC	
ENVIRONMENTAL		
Operating Temperature	-45°C to +70°C	
MECHANICAL		
Material	Electro-polished 316L Stainless Steel	
Windows	Germanium and Toughened Glass, Thermostatically Operated Demister [Wiper for Day / Night View only]	
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 x 1.25 tapped holes, equi-spaced on a 4" (101.6 mm) P.C.D.	
Dimensions (W x D x H)	412 x 310 x 375 mm	
Pan Turning Circle	Ø 626 mm	
Weight <sup>*1</sup>	19 kg	
ELECTRICAL		
Power Requirements	24Vac 50 / 60Hz or 24Vdc (±10%)	
Power Consumption	92VA Maximum	
TELEMETRY		
Interface	RS485 serial asynchronous data	
Protocols	Synectics™, Pelco®, and other industry standard protocols available	
Functions <sup>*1</sup>	Pan, Tilt, Wash <sup>*2</sup> , Wipe <sup>*2</sup> Aux1, [Aux2] and Aux in	
Day / Night Camera	On / Off Selection of: Digital Zoom, BLC, Autofocus	
Functions <sup>*2</sup>	Auto / Manual Selection of: Focus, Colour / Mono Operation, Frame Integration, White Balance	
Thermal Camera	3 step digital zoom (2x, 4x, 8x), Multiple Colour Palettes (including Inverted), Cross Hair Temperature Display,	
Functions <sup>*1</sup>	Auto / Manual Shuttering	
OSD	Password protected on-screen menu system for camera station configuration and diagnostics	
CAMERA / LENS		
	C2000-2V36-T3>> [2C36] [W] <sup>*5</sup>	C2000-2V10-T3>> [2C10] [W] <sup>*5</sup>
Video Output	1.0 Vpk-pk CVBS into 75Ω; Colour PAL 50Hz [NTSC 60Hz]	
Image Sensor	¼" EXview HAD CCD	⅓" Super HAD CCD II
Resolution	>550TVL	>530TVL
S/N Ratio	>50dB	
Zoom Range	36x zoom (up to 432x with digital zoom)	10x zoom (up to 120x with digital zoom)
Minimum Illumination	1.4 lux 0.1 lux (with ⅓ sec integration) 0.01 lux mono (with ⅓ sec integration)	0.25 lux 0.015 lux (with ⅓ sec integration) 0.0004 lux mono (with ⅓ sec integration)
Focal Length	3.4 to 122.4 mm	5.1 to 51 mm
Angle of View	57.8° to 1.7°	52° to 5.4°
Aperture	F1.6 to 4.5	F1.8 to 2.1
THERMAL IMAGER		
	C2000-2V<<-T345 [2C<<] [W] <sup>*5</sup>	C2000-2V<<-T315 [2C<<] [W] <sup>*5</sup>
Image Sensor	Uncooled VOx Microbolometer	
Spectral Response	8 – 14 μm	
Thermal Sensitivity	>50mK	
Refresh Rate	<9Hz [25Hz]	
Resolution	324 x 256	
Fixed Focal Length	35 mm	13 mm
Angle of View	13° x 10°	34° x 26°
Human Detection <sup>*3/4</sup>	~1000 m	>200 m

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. \*5 >> replace with thermal camera module and << replace with day / night camera module.

## Synectics

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Specifications subject to change. E & OE.

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MANUFACTURER OF  
  
 CAMERA STATIONS

Reference Numbers: 03GF0583\_2  
 C2000T2S3/0418/A4 Iss 5