



# CM123

DATASHEET

3-Axis Gyro-Stabilised Gimbal

IP66

<1Kg

LWIR

Low SWaP-C



# Technical Specifications

## Gimbal Capabilities

<b>Mechanical Axes</b>	3 (Pan,Tilt and Roll)
<b>Position Accuracy</b>	0.0046° (80 µrad)
<b>Elevation</b>	±120°
<b>Azimuth</b>	360° Continuous
<b>Slew Rate</b>	300° / sec
<b>Power</b>	Start Up 20W / Av. Rating 12W
<b>Voltage</b>	9 – 36V
<b>Modes</b>	Rate/ Scene/ Track/ GEO-Lock
<b>Communication Link</b>	Ethernet / RS232 Communication Libraries Available

## Internal Video Processor Features

<b>Recording on Board</b>	✓
<b>Encoding</b>	✓
<b>Object Tracking</b>	✓
<b>E-Stabilisation</b>	✓
<b>Scene Steering</b>	✓

## Hardware

<b>Weight</b>	1000g
<b>Diameter</b>	120mm
<b>Height</b>	200mm
<b>Temperature</b>	-10°C to +50°C
<b>Environment</b>	IP66
<b>MTBF</b>	> 1000 hours
<b>Shock Limit</b>	20 G
<b>Peripherals</b>	1x GPIO 1x SMA
<b>GPIO Functions</b>	Power Ethernet RS232 AHRS Composite Video

## Video Specifications

<b>Analogue Output</b>	Composite
<b>Digital Output</b>	h.264 MPEG2 TS / (RTP) MPEG4 MPEG2 TS / (RTP)
<b>Snapshots</b>	1280x720 (Stored On Board)
<b>Standards</b>	MISB (0102.10, 06017, 0603.2, 0604.3, and 0903.3) & STANAG (4609 ) Compliant

## Internal INS

<b>Horizontal Position Accuracy</b>	2.0m
<b>Vertical Position Accuracy</b>	3.0m
<b>Heading Accuracy</b>	0.8°
<b>Accelerometer Range</b>	Up to 16g
<b>Supported Systems</b>	GPS L1 / GLONASS L1 GALILEO E1 / BeiDou L1
<b>Timing Accuracy</b>	30ns

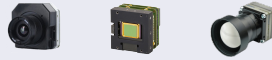
# Standard Configurations

## Electro-Optical (EO)



<b>Type</b>	CCD Global Shutter
<b>Resolution</b>	1280 x 720
<b>FoV</b>	31.4° Wide to 1.1° Tele
<b>Zoom</b>	30x Optical
<b>Frame Rate</b>	25 Hz

## Infrared (IR)



<b>Sensor</b>	Tau 2 640	XTM640	Quark 640
<b>Type</b>	LWIR	LWIR	LWIR
<b>Resolution</b>	640x480	640x480	640x480
<b>Lens</b>	35mm	3x Optical	3x Optical
<b>Frame Rate</b>	Up to 30Hz	Up to 30 Hz	Up to 30 Hz



## Laser



<b>Sensor</b>	Nano Point
<b>Wavelength</b>	852nm
<b>Class</b>	IIIB
<b>Power</b>	Up to 150mW

Other sensor configurations are available. Contact a member of the sales team for more information.

# Detect, Recognise, Identify

	EO	IR at 8.9° 3x Zoom Lens	IR at 18° 35 mm Lens	IR at 12.4° 50 mm Lens
 Detect	9,000 m	1,670 m	800 m	1,200 m
Recognise	4,500 m	560 m	270 m	400 m
Identify	2,500 m	310 m	150 m	220 m
 Detect	18,500 m	3,670 m	1,800 m	2,600 m
Recognise	9,900 m	1,220 m	600 m	870 m
Identify	5,560 m	690 m	340 m	490 m