

# CM 100

DATASHEET

Dual Sensor Gyro-Stabilised Gimbal

IP63

800 g

LWIR

Low SWaP-C



ITAR  
FREE



# Technical Specifications

## Gimbal Capabilities

<b>Mechanical Axes</b>	2 (Pan and Tilt)
<b>Position Accuracy</b>	0.022° (380 µrad)
<b>Elevation</b>	±120°
<b>Azimuth</b>	360° Continuous
<b>Slew Rate</b>	105°/sec (1.83 rad/s)
<b>Power</b>	12W
<b>Voltage</b>	9 – 36V
<b>Modes</b>	Rate/ Scene/ Track/ GEO-Lock
<b>Communication Link</b>	Ethernet / RS232 Communication Libraries Available

## Hardware

<b>Weight</b>	800g
<b>Diameter</b>	100mm
<b>Height</b>	129mm
<b>Temperature</b>	-10°C to +50°C
<b>Environment</b>	IP63
<b>MTBF</b>	> 1000 hours
<b>Shock Limit</b>	20 G
<b>Peripherals</b>	1x GPIO
<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, 0601.7, 0603.2, 0604.3, and 0903.3) & STANAG (4609 ) Compliant

## Compatible INS

<b>Spatial</b>	✓
<b>Spatial Dual</b>	✓
<b>MicroPilot</b>	✓

## Internal Video Processor Features

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

# 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>	Up to 30 Hz

## Infrared (IR)



<b>Sensor</b>	Quark 336	Quark 640
<b>Lens</b>	19/ 25/ 35 mm	19/ 25/ 35 mm
<b>Type</b>	LWIR	LWIR
<b>Resolution</b>	640x480	640x480
<b>Zoom</b>	2x, 4x Digital	2x, 4x, 8x Digital
<b>Frame Rate</b>	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 at 1.1° HD	IR at 32° 19mm Lens	IR at 25° 25mm Lens	IR at 18° 35mm Lens
 Detect	6,500 m	340 m	440 m	610 m
Recognise	3,370 m	110 m	150 m	200 m
Identify	1,900 m	60 m	80 m	120 m
 Detect	17,000 m	740 m	960 m	1,350 m
Recognise	7,410 m	250 m	320 m	450 m
Identify	4,170 m	140 m	180 m	250 m