

**MIRADOR** is a compact, fast and highly accurate Electro-Optical observation and tracking system. MIRADOR provides accurate target tracking data of highly manoeuvring air and surface targets for precise fire control of weapon systems. The EO suite includes two TV cameras, one IR camera and an eye-safe Laser Range Finder.

## EO TRACKING AND OBSERVATION SYSTEM

- High precision Fire Control against agile air and surface targets
- Short reaction time in multiple target scenarios
- High reliability and low life cycle costs
- In-mission sensor replacement



# MIRADOR

High precision fire control against agile targets





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### HIGH PRECISION FIRE CONTROL AGAINST AGILE AIR AND SURFACE TARGETS

MIRADOR provides very accurate data for small and medium calibre gun and short range missile systems fire control.

The use of high quality servo hardware and algorithms leads to precise pointing accuracy.

The rigid structure is optimised for stability against temperature-dependent misalignment and vibrations.

This emphasis on providing high precision data ensures effective gun fire control.

### SHORT REACTION TIME IN MULTIPLE TARGET SCENARIOS

MIRADOR is capable of automatic target acquisition without operator intervention during autonomous sector scan or following an external target designation.

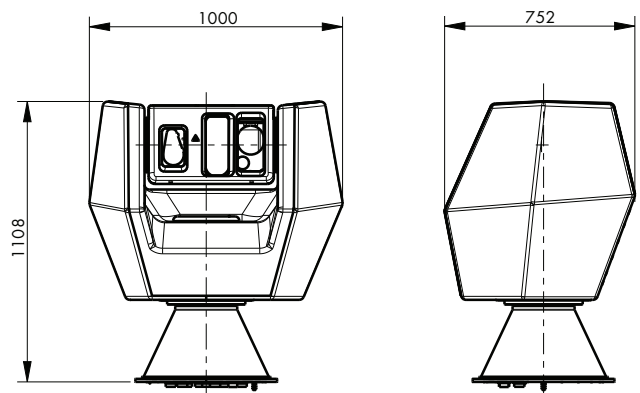
The direct drive servo delivers very fast slewing even under extreme environmental conditions. The combination of both automatic acquisition and short slew time significantly reduces the reaction time, which is essential for target engagements in multiple target scenarios.

### HIGH RELIABILITY AND LOW LIFE CYCLE COSTS

Increased reliability and reduced need for maintenance are realised by:

- Direct drive servos instead of gear boxes
- A cable winder instead of a slipping
- Highly integrated processing

This emphasis on high reliability and low maintenance results in low life cycle costs.



### IN-MISSION SENSOR REPLACEMENT

A plug-and-play mechanism realises a fast and accurate in mission replacement of EO sensors avoiding the need for realignment

Fire Control System Characteristics	
Azimuth coverage	360°
Elevation coverage (with respect to deck)	-30° to +120°
Slew rate	Training 5 rad/s, Elevation 4 rad/s
Slew time	Training 1.1 sec for 90° Elevation 0.7 sec for 90°
Range coverage	0.2 - 40 km (Laser)
Range accuracy	5 m (1σ)
Angular accuracy	0.3 mrad (1σ)
MTBCF	4500 hr

EO Characteristics	
IR Camera	Cooled 3-5 μm FOV 1.35° x 1.1° (microscan) & 7.5° x 6.0° Detector 640 x 512 CMT NETD 50 mK
TV Track camera	FOV 2° x 1.5° Focusing range 100 m - ∞ Dynamic range 1 – 250k Lux
TV Colour Zoom Camera	FOV 1.6° x 1.2° to 42° x 32° Focusing range 1 m - ∞ Dynamic range 1 – 200k Lux
Laser Range Finder	Diode pumped Eye safe class 1M 6 Hz firing rate

Installation data	
Weight (above deck)	220 kg
Weight (below deck)	65 kg
Power requirements	4.5 kVA max
Cooling requirements	Not needed

The MIRADOR is in full series production.  
More than 70 systems in operational use by 10 navies.

