



## DAY/NIGHT FIRE CONTROL SYSTEM

Mini Colibri-D is an indirect view Electro-Optic FCS for use in short to medium range applications. It is capable of target engagement under all weather conditions during both day and night. Target engagement is carried out remotely from within the turret.

The system can be used as Aiming and/or Fire Control System for both short and medium-range applications (e.g. small to medium size weapon systems, operations in an urban environment, in reconnaissance vehicles and mortars operating in direct fire mode).

Mini Colibri-D offers the following functionality:

- Daylight observation and firing, by means of TV camera with zoom
- Night-time observation and firing, by use of the Uncooled Long Wave IR sensor
- Range measurement, by means of Laser Range Finder
- Ballistic reticule control, and emergency reticules
- Indirect observation of the outside scenario via the System Control Unit located inside the turret.

### KEY FEATURES

The IR and TV CCD channels together provide an ‘all-weather’ capability.

During target detection or engagement the operator can select the best view based on environmental conditions for both air and ground targets. The optional tracker function integrated into the Mini Colibri-D. FCS can operate both types of view (IR and TV CCD). The open architecture of the System allows for easy integration into Battlefield Management Systems (BMS).



Sensor Head

# MINI COLIBRI-D

## COMPOSITION

Mini Colibri-D is made up 3 Line Replaceable Units - a Sensor Head, a System Display Panel and an Interconnection Cable.

## SYSTEM

### Output

This equipment provides the target range data acquired by the LRF and images acquired either, by the IR or by the TV camera, to be displayed on the System Display Panel.

### Optional System Console

the system console, displaying images and data coming from the sensors integrated in the Sensor Head. By means of standard pop-up menus, it enables easy management of the different operating states of the equipment, the interfaces with the weapon platform.

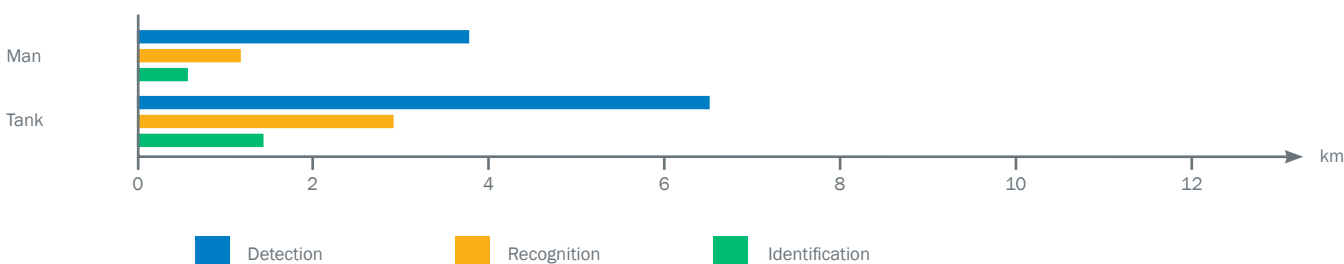
It includes a computation module able to carry out the Fire Control System computations, i.e. to find the most appropriate ballistic solution for the assigned firing table at the measured or estimated distance to the target. The System Display Panel autonomously manages the aiming reticules, driving them to reflect the appropriate ballistic solution.

## TECHNICAL SPECIFICATION

### Multi-Function Head

MAIN CHARACTERISTICS	
Video output	PAL or HD-SDI
Command Line IF	RS 422 or LAN 1000
Power	18 - 32 VDC According to MIL-STD-1275 D
Operating temperature	-32°C to +60°C
MECHANICAL CHARACTERISTICS	
Size (L x H x W)	316mm x 166mm x 253mm
Weight	approx. 9kg
IR CAMERA	
Detector	LWIR, 8 - 14µm Staring Focal Plane Array (640 x 480)
Pitch	17µm
Sensitivity	<55mK (WFOV)
Wide FOV	13.8° x 10.3°
Narrow FOV	4.6° x 3.4°
DAYTIME CAMERA	
Sensor Type	Full HD C-MOS
Wide FOV Horizontal	47.8° (PAL) / 63.7° (1080p)
Narrow FOV Horizontal	1.7° (PAL) / 2.3° (1080p)
Zoom	30X (optical), 12X (digital)
LASER RANGE FINDER (LRF)	
Wavelength	1.570 nm, nominal
Range Read-out limits	Minimum 50m, Maximum 12000m
SYSTEM DISPLAY PANEL (OPTIONAL)	
Size (L x H x W)	340mm x 235mm x 82.5mm
Weight (std)	approx 3.5Kg
Dimension (diagonal)	12.1" inches

## RANGE PERFORMANCE - IR CAMERA



## RANGE PERFORMANCE - DAYTIME CAMERA

