



DAY/NIGHT GUNNER SIGHT

LOTHAR (Land Optronic Thermal Aiming Resource) is a modular and compact sight designed to deliver identification, recognition and pin-point targeting capabilities to the gunner, day or night.

In operation/deployed on the Italian Army, LOTHAR can be linked to the gun or independently stabilised. As a key component of a Fire Control System, LOTHAR can be integrated into turrets controlling guns from 25 - 30mm to 120 - 125mm.

LOTHAR incorporates the company's latest thermal imaging modules, either LWIR or MWIR proprietary detectors, a high performance colour CCD TV, an eye-safe Laser Range Finder, a daylight elbow and all the facilities needed for a perfect control of fire.

KEY BENEFITS

- High performance detection, aiming and tracking capabilities whilst stationary and on the move
- State-of-the-art full digital equipment matching with today's Vetronics requirements and concepts
- Modular design for easy installation into small AIFV turrets as well as last generation MBTs
- Optimised cost to performance ratio
- Simple controls easy to operate
- Reduced maintenance burden through self test tools
- Flexible interfaces for easy integration on existing and new vehicles.

TECHNICAL SPECIFICATION

MIRROR HEAD	GUN LINKED HEAD	2 AXES STABILISED HEAD
	Stabilization NO (linked to weapon)	2 axes/ 0.05mrad rms
Field of Regard (Elevation)	-20° to +60° (Slaved to weapon)	-20° to +60°
Field of Regard (Traverse)	Slaved to turret	-9° to +9°
Mirror speed	N/A	0.2 mrad/s to 0.5 rad/s
Gun Elevation Sensor	YES	N/A
Digital Vertical Sensor	N/A	YES

CCD COLOUR TV	
Detector elements	Color CCD 752 x 582 pixel
Resolution	450 x 415 TV lines
CCD Sensitivity	>10 lux
Output	PAL
Narrow FoV	3.2° x 2.4°
Wide FoV	8.0° x 6.0°

LASER RANGE FINDER (EYE SAFE)	
Wavelength	1.54µm (eye-safe)
Pulse Rate	10ppm (1Hz burst)
Cooling System	Air
Processing Range	100m to - 10000m
Resolution	5m

DAYLIGHT ELBOW (OPTIONAL)	
Field of View	5.6° cone (10X)
Filters	Laser Protection (1.064 and 0.694 µm)
Eyepiece adjust	From -5D to +5D
Boresight of aiming reticule	YES

DIMENSIONS/WEIGHT	GUN LINKED VERSION	STABILIZED VERSION
Dimensions (mm)	535 x 385 x 265	635 x 415 x 310
Weight (Kg)	30-35	33-38 (+ Backup Sight 4Kg)
Depending on IR camera conf.		

MAN MACHINE INTERFACE	
Multi Function Graphic Control Console	
Stadimetric and ammo ballistics scales	
Video Tracker	
Video Processing	

SYSTEM INTERFACES	
RS-422, ETH 10-100, CANBus, Time Triggered Ethernet 10/100 SERCOS III	

POWER	
Supply	28 VDC (18-36 VDC)
Standard	MIL STD 704D

ENVIRONMENT	
Standard	MIL STD 810E
Operating temperature	-30°C to +55°C
Storage temperature	-40°C to +70°C

OPTIONS	
Built-in Muzzle Reference System (MRS)	
Armoured protection	
Lens wipers	
Defrosting device	

THERMAL IMAGER (TILDE S)	
Bandwidth	8 - 12µm (LWIR)
Detector	640 x 512 (MCT FPA)
Narrow FOV	2.5° x 2.0°
Wide FOV	9.0° x 7.2°
Medium FOV	4.0° x 3.2°
Sensitivity	25mK
Integrated DVP	Contrast enhancement Contour enhancement Local area processing
Digital zoom	2 - 4x
Video output	CCIR 625/50

THERMAL IMAGER (ERICA)	
Bandwidth	3-5µm (MWIR) or 8-12 µm (LWIR)
Detector	640 x 512 (MCT FPA)
Narrow FOV	2.4° x 1.9° or 2.5° x 2°
Wide FOV	8° x 10° or 9° x 7.2°
Sensitivity	15mK or 25mK
Integrated DVP	Contrast enhancement Contour enhancement Local area processing
Digital zoom	2 - 4x
Video output	CCIR 625/50hz/SVGA

RANGE PERFORMANCE (KM)

