

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 eyesafe 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	2 axes/ 0.05mrad rms
	(linked to weapon)	
Field of Regard (Elevation)	-20° to +60°	-20° to +60°
	(Slaved to weapon)	
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 um)
	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 co	nf.	

Multi Function Graphic Control Console Stadimetric and ammo ballistics scales Video Tracker	
Ottoannethe and annino banotico ocarco	
Video Tracker	
VIUEU Hackel	
Video Processing	

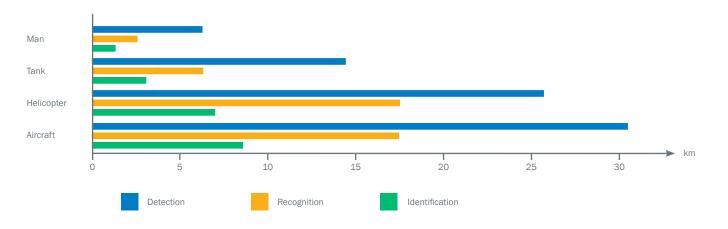
SYSTEM INTERFACES		
RS-422, ETH 10-100, CANBus, Time Triggered Ethernet 10/100 SERCOS III		
POWER		
Supply	28 VDC (18-36 VDC)	
Standard	MIL STD 704D	
ENVIRONMENT		
Standard	MIL STD 810E	
Operating temperature	-30°C to +55°C	
Storage temperature	-40°C to +70°C	

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°
Sensitiity	25mK
Integrated DVP	Contrast enhancement
	Contour enhancement
	Local area processing
Digital zoom	2 - 4x
Video output	CCIR 625/50

THERMAL IMAGER (ERICA)	
Bandwidth	3-5um (MWIR) or 8-12 um (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
Digitial zoom	2 - 4x
Video output	CCIR 625/50hz/SVGA

RANGE PERFORMANCE (KM)





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