



EOSS- 450/RF

ELECTRO-OPTICAL SURVEILLANCE SYSTEM

EOSS-450/RF SYSTEM IS DESIGNED FOR H.24 OPTRONIC SURVEILLANCE AND RANGE FINDING ESPECIALLY FOR SECURITY APPLICATIONS

FEATURES

- h24 passive detection, classification, designation, identification and tracking of surface and low-speed air targets
- Fully automatic search for reducing operator workload in target detection and acquisition tasks
- Stabilization against mast/infrastructure motion
- Remote control
- Long range operation

APPLICATIONS

- Homeland Security
- Vessel Traffic System (VTS), Vessel Traffic Management & Information Systems (VTMIS)
- Coastal Surveillance & Security





TECHNICAL INFORMATION

Payload	
Physical shape:	ball-shape
Gyroscopes:	Two, fiber optic type
Control Angle:	continuous N x 360° both in azimuth & elevation
Slewing Velocity:	> 180°/s
Angular accuracy:	better than ± 0.1°
Stabilization error:	better than 0.005°
Operating temperature:	-20°C ÷ +55°C (external units) 0°C ÷ +50°C (internal units)
Power supply:	220 VAC @ 50Hz, 1000 VA absorption (peak)
External interface:	RS-422 (external sensors); Ethernet (video / controls)

DLTV Camera	
Type:	colour 1/1.9" CMOS sensor
Lens:	continuous variable zoom 11 ÷ 245 mm
Max aperture ratio:	1:1.6
Video resolution:	1920x1080 (Full HD, 1080P), 2.07 Mpixel approx.
Field of View (H):	NFOV: ≤ 2° WFOV: ≥ 50°
Sensor gain:	automatic / manual
S/N ratio:	50 dB (rms) or better
Day / night mode:	selectable in auto / manual mode
Minimum illumination:	Colour mode: 0.05 lux B/N mode: 0.01 lux

IR camera	
Detector type:	cooled InSb 15 µm pixel pitch
Spectral band:	3 ÷ 5 µm
Lens:	15-300 mm, continuous zoom, F/4
Field of view (H):	NFOV: 1.8° WFOV: 35.5°
Cooler:	Stirling cooler
Cooldown time:	< 7 min @ 20°C
Resolution:	640 x 512
NETD (sensitivity):	< 16 mK typical @ 20°C (without lens)

Laser rangefinder	
Transmitter type:	flashlamp pumped Nd:YAG laser
Wavelength:	1.57 µm, eyesafe, linear polarization
Receiver type:	APD photo diode based type
Repetition rate:	Continuous: 1 Hz Burst mode: 3 Hz for max. 10 s after an idle period of 30 s min.
Measuring range:	from 100 m to 20000 m
Measuring accuracy:	± 5 m
Range discrimination:	5 m

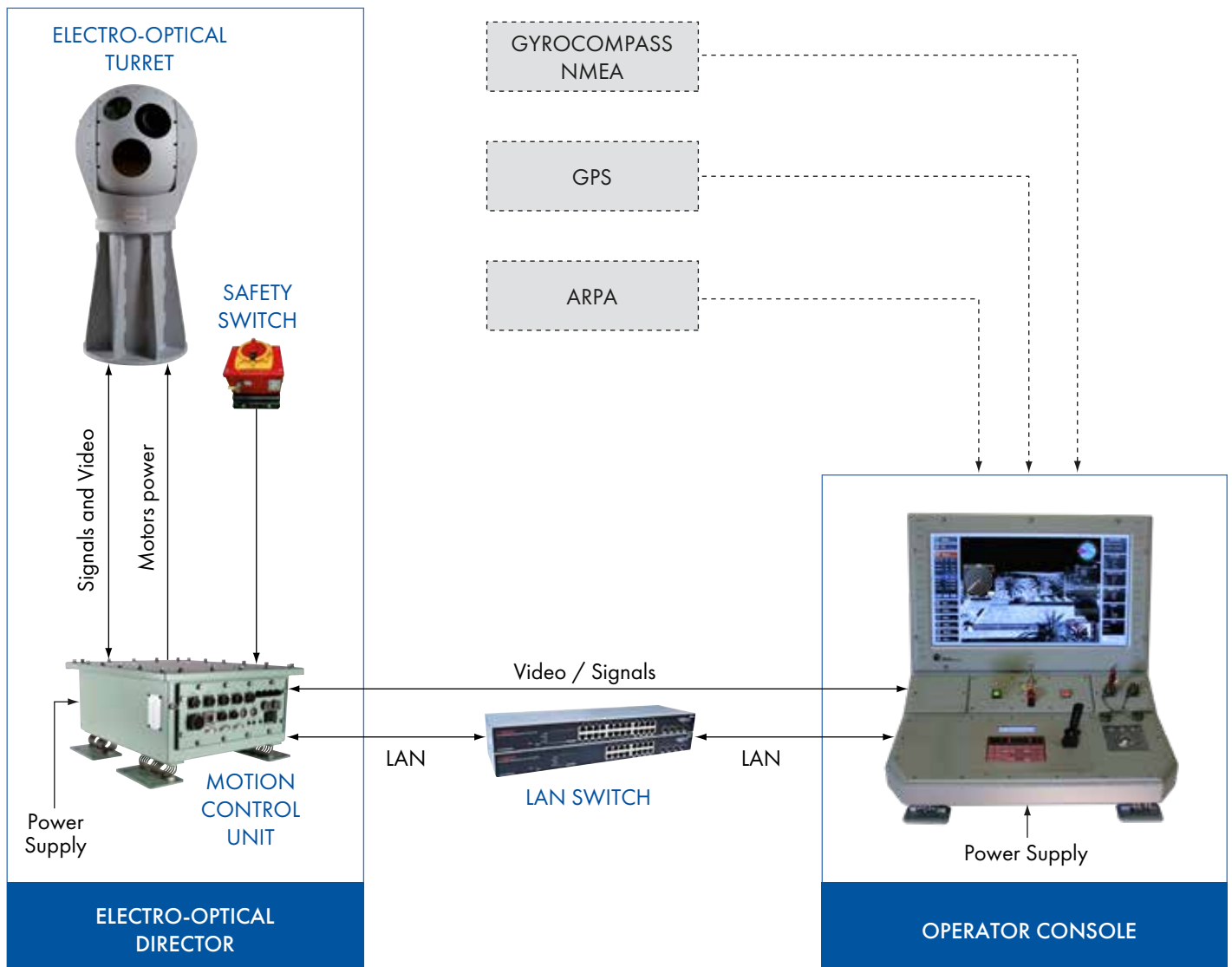
SUPPLY COMPOSITION

- Electro-Optical stabilized Turret with TV and cooled IR cameras and laser rangefinder
- Rugged Motion Control Unit
- Operator console consisting of 24" display unit with integrated keyboard/joystick
- Video Tracker module embedded in the Display unit software for closed-loop optronic tracking
- Installation kit
- Technical manual of the system in English language
- Certificate of conformance
- Packing list

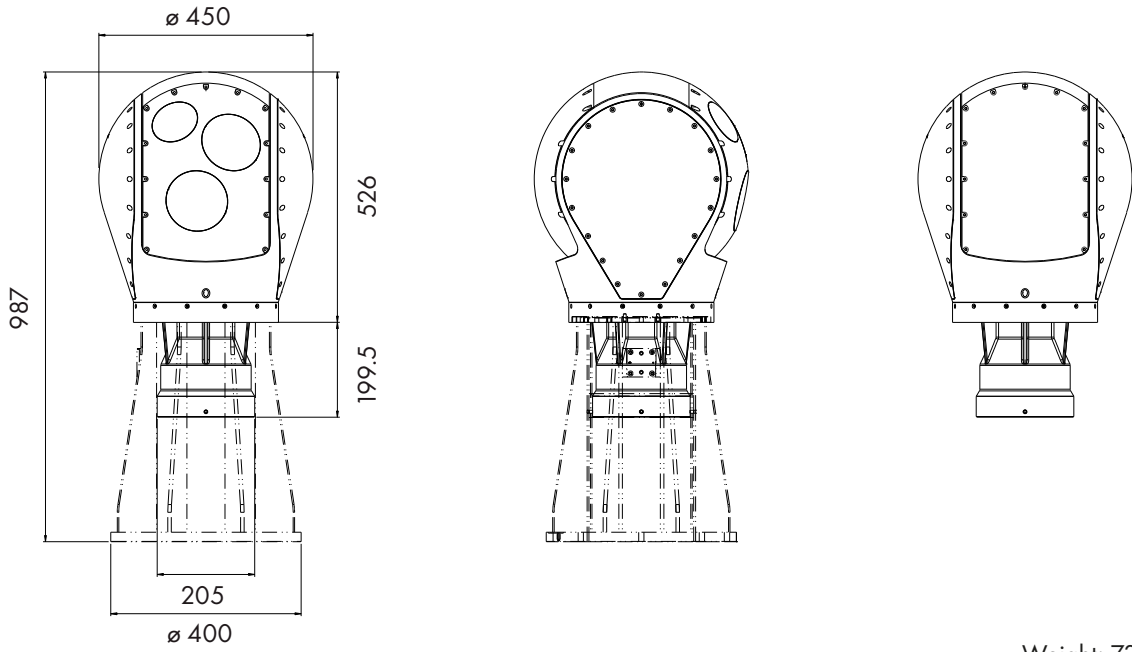
OPTIONS

- Depending on installation requirements, cable lengths are delivered in accordance with Buyer's instructions
- Customization versus specific requirements can be evaluated in terms of cost-effectiveness

GENERAL CONNECTION DIAGRAM

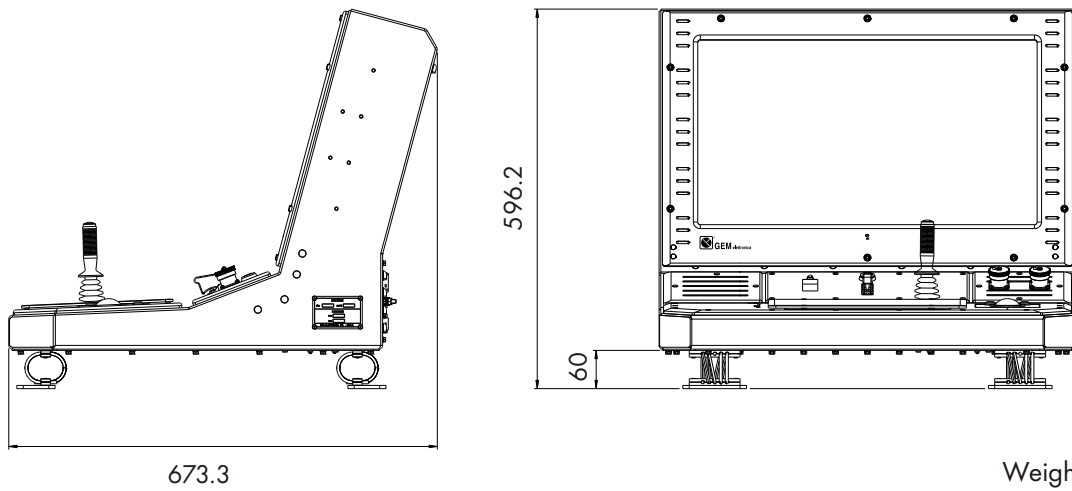


Electro-Optical turret



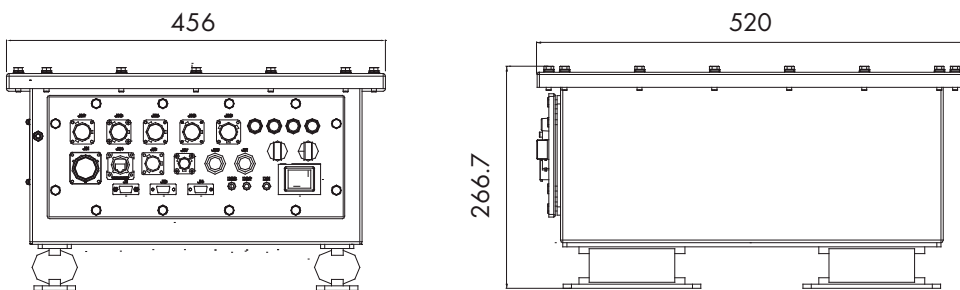
Weight: 73 Kg

Console



Weight: 40 Kg

Motion Control unit



Weight: 20 Kg

