



EOSS- 450

ELECTRO-OPTICAL SURVEILLANCE SYSTEM

EOSS-450 SYSTEM PROVIDES EXTENDED RANGE
H.24 OPTRONIC SURFACE SURVEILLANCE.

FEATURES

- h24 passive detection, designation, classification, 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

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

DLTV Camera

<i>Type:</i>	colour 1/1.9" CMOS sensor
<i>Lens:</i>	continuous variable zoom 11÷245 mm
<i>Max aperture ratio:</i>	1:1.6
<i>Video resolution:</i>	PAL: 1920(H) x 1080(V), 2.07 Mpixel approx.
<i>Field of View (H):</i>	NFOV: $\leq 2^\circ$ WFOV: $\geq 50^\circ$
<i>Sensor gain:</i>	automatic / manual
<i>S/N ratio:</i>	50 dB (rms) or better
<i>Day / night mode:</i>	selectable in auto / manual mode
<i>Minimum illumination:</i>	Colour mode: 0.05 lux B/N mode: 0.01 lux

IR camera

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



ELECTRO-OPTICAL SURVEILLANCE SYSTEM

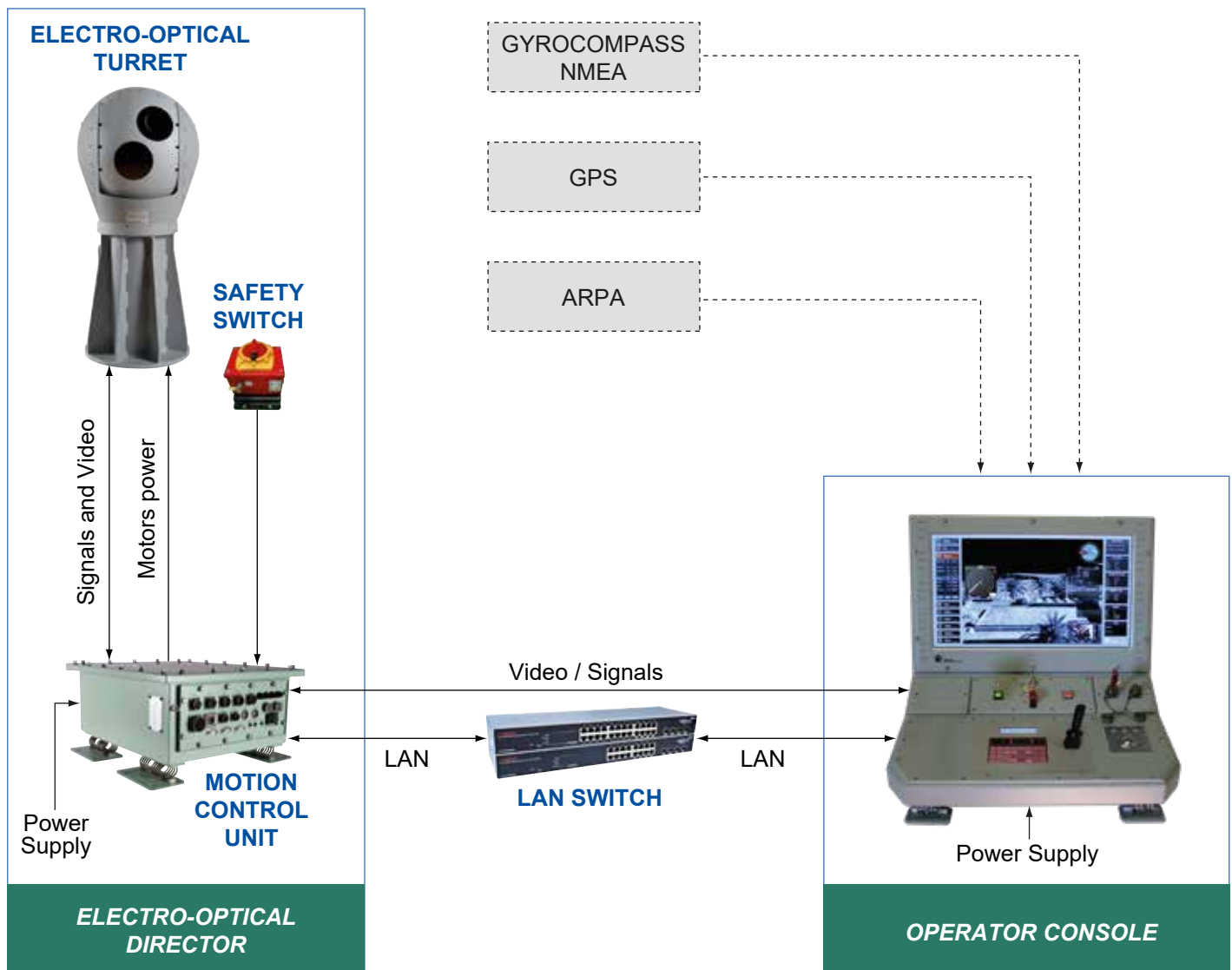
SUPPLY COMPOSITION

- Electro-Optical stabilized Turret with TV and cooled IR cameras
- 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

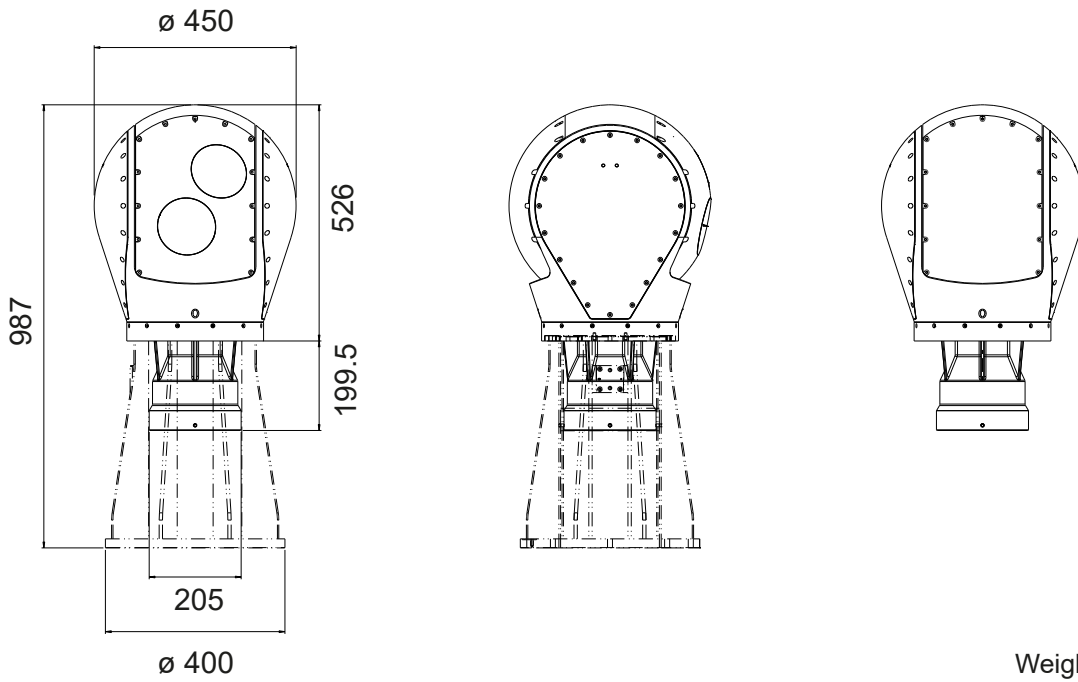
OPTIONS

- 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

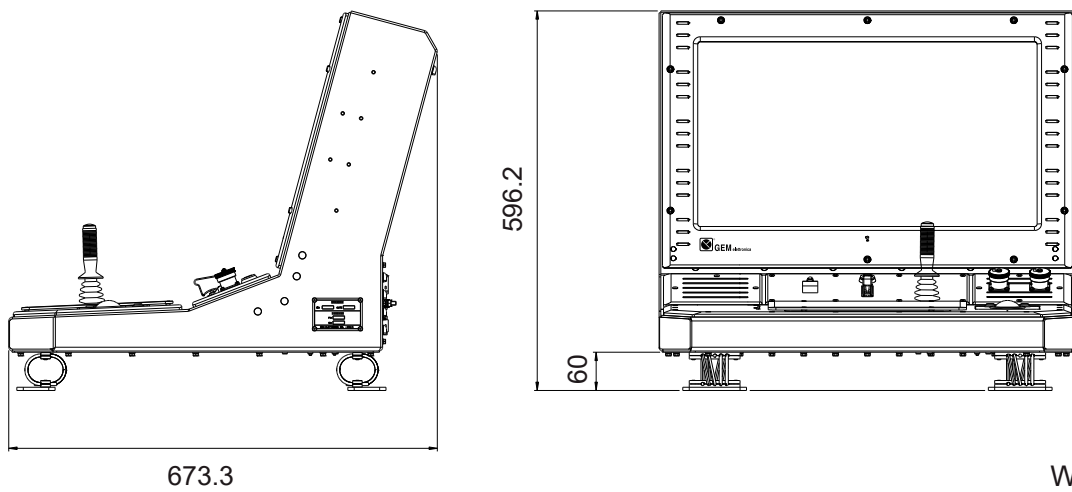


Electro-Optical turret



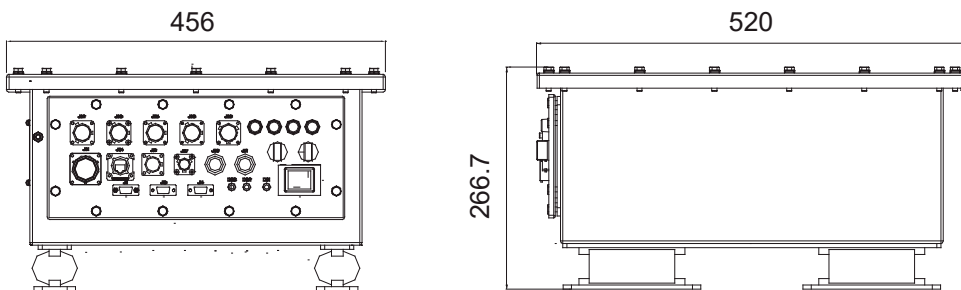
Weight: 73 Kg

Console



Weight: 40 Kg

Motion Control unit



Weight: 20 Kg

Surveillance & Security

Guidance, Navigation & Positioning

Military & Defence

Marine Electronics

This brochure should not be considered a contractual offer. The specifications given herein may be changed by the manufacturer, GEM elettronica, without notice.



GEM elettronica

marketing@gemrad.com www.gemrad.com

