



SEOSS 500

2-AXIS STABILIZED SENSOR HEAD

DESCRIPTION

The SEOSS500 is a 2-axis stabilized sensor head with daysight- and IR-cameras as well as two laser range finders. The SEOSS 500 is designed to meet the requirements for high performance weapon stations for land and naval vehicles.

Basic functions:

- Provision of daysight images
- Provision of infrared images
- Laser range finder
- Inertially stabilized
- Fire control

The SEOSS 500 comprises two different laser range finders. Combining the advantages of both technologies, the twin-laser configuration offers:

- Automatic internal range verification
- Confident laser measurement
- In-operation redundancy to support availability even in critical operational conditions

SPECIFICATION SEOSS500

Length x width x height (w/o connector panel)	–
Weight	–
Interfaces	Ethernet 1 Gbit Ethernet 10GBit EtherCat/ProfiNet
Ballistic protection	–
Motion control	
AZ-range	n x 360°
EL-range	–40° to +85°
LOS stabilization	1σ ≤ 60 μrad (Navy scenario)
Power supply	115 – 350 VAC 18 – 32 V acc. Mil-STD-1275
DC-current	
Inrush	–
Rated	–
Nominal at nominal voltage	–
Temperature range	–
Shock/vibration	–

SPECIFICATION DAYSIGHT CAMERA

Image sensor	
Technology	CMOS, RGB
Resolution	2464 x 2056
Framerate	60 Hz
Pixelpitch	3.45 μm
Wavelength	350 – 1,100 nm
FoV	1.4° to 32°, distinct fields of view
Additional information	Global shutter
IR Cutoff filter	Transmission range 400 – 700 nm
Dynamic range	72 dB
DRI	
B3 Armoured vehicle (2.3 m x 2.3 m)	
1/3/6 LP STANAG 4347	D: >19.5 km R: >10.8 km I: >6.45 km

SPECIFICATION THERMAL IMAGER

Image sensor	
Technology	CMT FPA
Resolution	1024 x 768
Framerate	up to 60Hz
Pixelpitch	10 µm
Wavelength	3 µm to 5 µm
FoV	1.4°; 6.67°
Cool down time	<6:30 min. @21°C ambient temperature
NETD	<38 mK (typ. 25 mK)
IETD	<NETD
Cooler MTBF	>50.000h
DRI	
B3 Armoured vehicle (2.3 m x 2.3 m)	
1/3/6 LP STANAG 4347	D: >20.4 km R: >11.5 km I: >7.1 km

SPECIFICATION LASER RANGE FINDER

Type	1.5-micrometer diode laser and diode pumped Er: glass laser
Range	>10,000 m and >40,000 m
Measurement accuracy	±5 m typical
Wavelength	1,550 nm and 1,535 nm
Pulse rate	25 Hz and 10 Hz
Safety classification	Laser Classification 4: Class 1 M

Rheinmetall Electronics GmbH

Brüggeweg 54

28309 Bremen, Germany

www.rheinmetall.com