

SEAEAGLE-350/12/S

GEM ELETTRONICA
a LEONARDO company



S-BAND 400 W SOLID STATE RADAR SENSOR



Ultra low noise, compact radar sensor.
Specially designed for different applications.

The SEA EAGLE-350/12/S is the newest antenna systems featuring S band 400W solid state transmitter and full coherent transceiver, based on the most updated video and graphic processing techniques; its most outstanding feature, anyway, is the use of a coherent transceiver, strongly increasing the detection capability of small targets in severe environmental conditions.



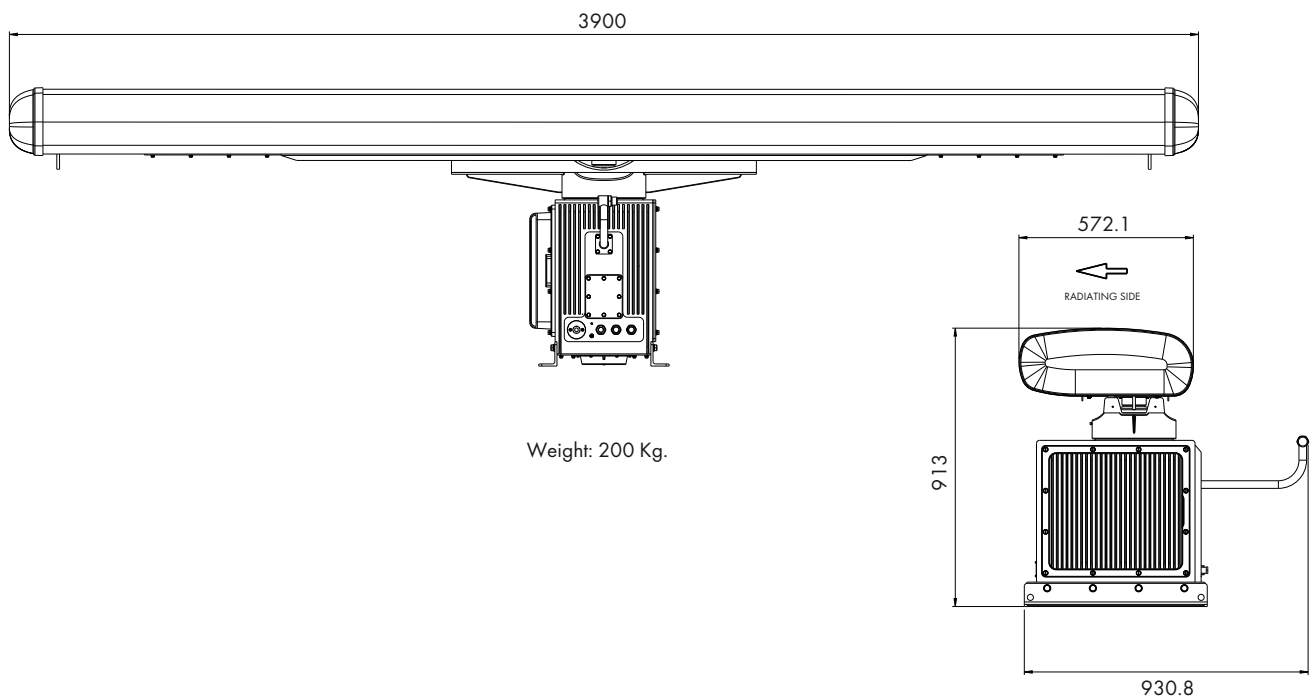
Military & Defence

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ARRAY MODEL	12 feet
Type	Slotted waveguide array
Frequency band	2900 ÷ 3100 MHz
Polarization	Horizontal
Horizontal beamwidth	1.9° ± 0.1°
Vertical beamwidth	25° ± 10%
Gain	≥ 27 dBi
SLL within @ ± 10°	≤ 26 dB
beyond @ ± 10°	≤ 30 dB
Rotation speed	16 ± 2 r.p.m. or 22 ± 2 r.p.m. (according to the operation mode)
Tolerable relative wind speed:	100 knots (operative) – 120 knots (non operative)

ENVIRONMENTAL PERFORMANCES	
Operating temperature range:	From -25°C to +55°C (external units) From -15° to +55° C (internal units)
Relative humidity:	93% at +40° C
Storage temperature range:	From -40°C to +70°C
Tolerable Vibrations:	In accordance with IEC-60945 ed. 4 par. 8.7
Shocks:	in accordance with IEC-62388 ed.2 par. 17.3
Salt environment:	In accordance with IEC-60945 ed.4 par. 8.12
EMI:	In accordance with IEC 60945 ed.4 par. 9 and 10



TRANSCEIVER UNIT PERFORMANCE	
Transmitter type:	multi-stage solid
Peak power:	400 W (nominal)
Average power:	depending on mode, up to 40 W
RF spectrum occupation:	compliance with IMO/ITU rules
Selectable frequencies:	approx. 6
Receiver:	coherent linear
Noise figure:	< 4 dB
IF frequency:	75 MHz
Receiver bandwidth:	20 MHz
Dynamic range:	104 dB (excluding compression gain)
Waveform generator:	direct digital synthesizer
Minimum range:	40 m
Instrumental ranges:	from 0.25 nmi up to 96 nmi
PRF:	from 500 to 2400 Hz
Pulse widths:	from 0.07 to 25 µs
Main supply:	220/115 Vac, 50/60 Hz
Reliability:	> 50000 hours
Availability:	99,995%
Maintenance:	major parts to be replaceable on field without calibration
Diagnostic:	BITE, including but not limited to Tx power and receiver parameters and system status indication (Tx/Rx on, Ready to transmit / Transmitting, Pulse length selected indication)
Interfaces:	Ethernet

