

SEA EAGLE-350/12/S



S-BAND 400 W SOLID STATE RADAR SENSOR



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

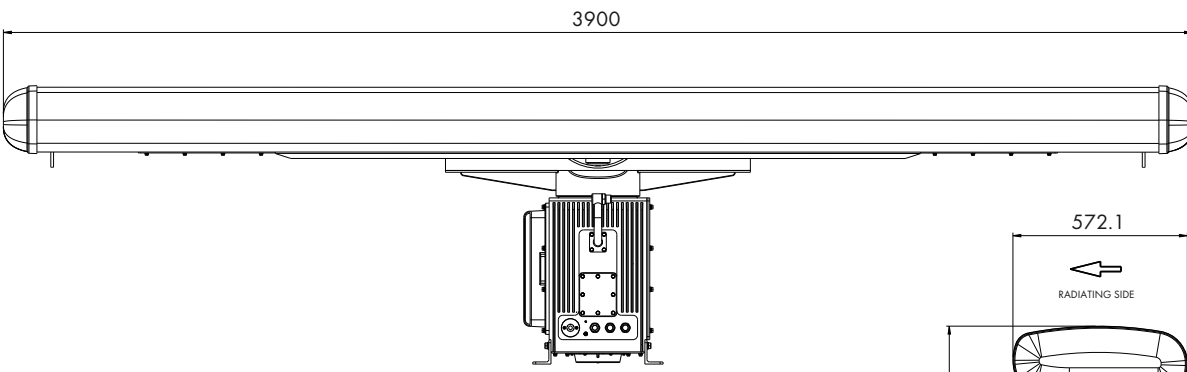
The SEA EAGLE-350/12/S is the newest antenna systems featuring S band 400W solid state transmitter and full coherent transceiver, based on the most updated video and graphic processing techniques; its most outstanding feature, anyway, is the use of a coherent transceiver, strongly increasing the detection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



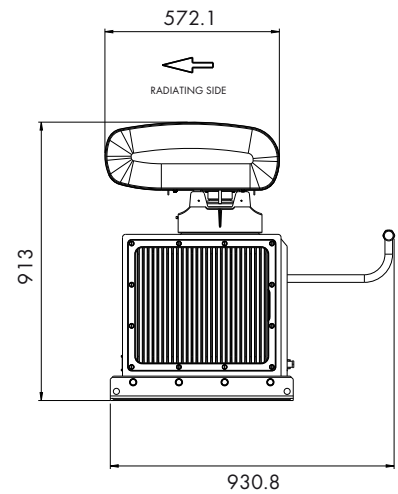
SEAEAGLE-350/12/S

| 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 |



Weight: 200 Kg.



| 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 |

