PHOBOS M10 R-ESM-
Lighter, smarter, ready to detect

For mounting either side of vessel superstructures

The Phobos Threat Warner/RESM is a fully capable, compact, affordable, integrated EW sensor system comprising: Antennas, RF Processing, Digital Processing, De-interleaving & Emitter ID/Library Matching, and Operator Interface.

RADAR · SEA · RETROFITS

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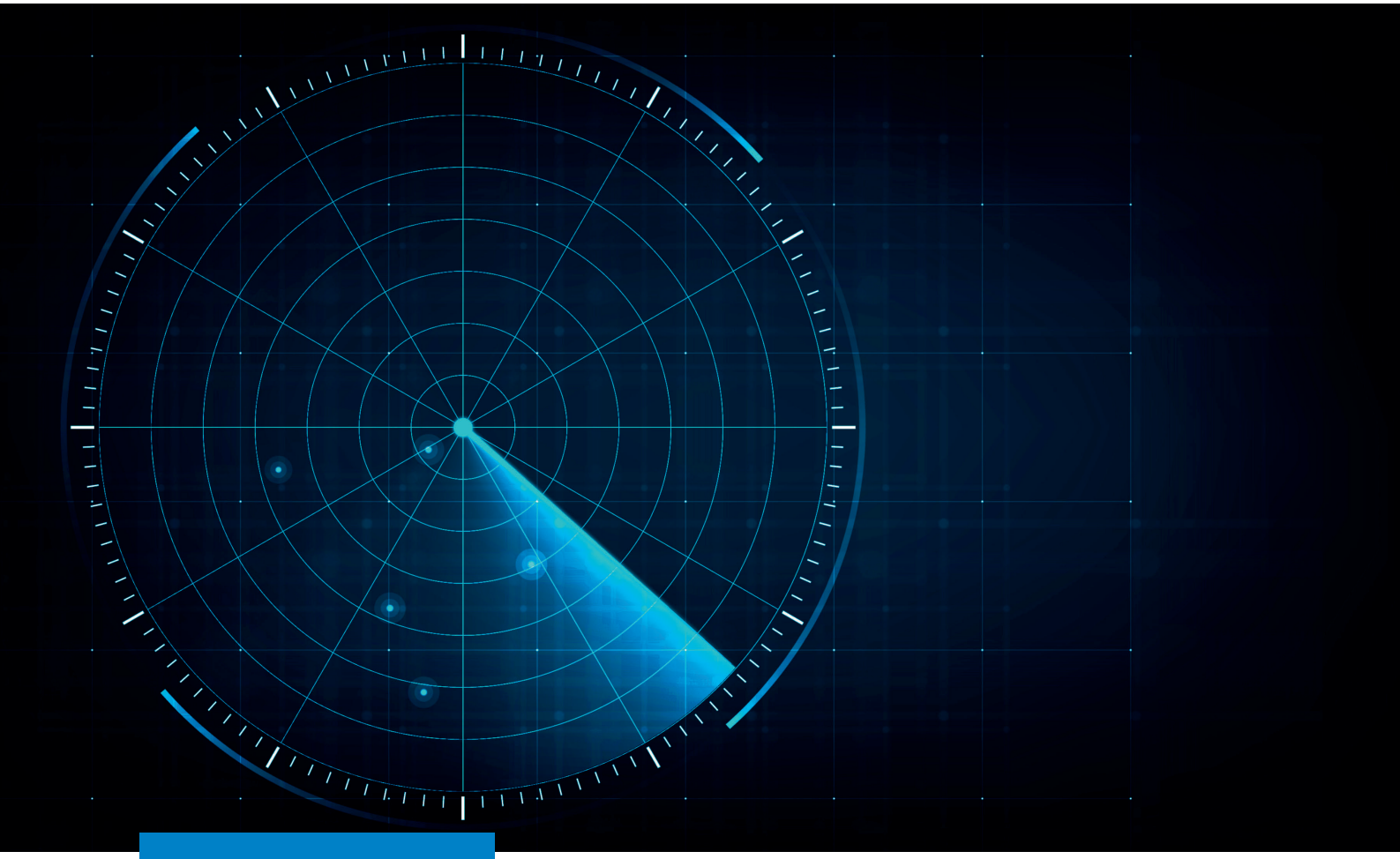

FEATURES

- Very Low Power Consumption (80 Watts)
- 2-18GHz Instantaneous Frequency Range
- Full 360° Azimuth Coverage
- Bearing Accuracy up to 3° rms (TX antenna V/H)
- Rapid Threat Warning (Emitter ID < 1sec)

BENEFITS

- Fully Passive Operation Mode
- Capable of detecting Pulse, CW, FMCW
- Open System Architecture
- Continuous and Interruptive passive BIT
- Network enabled connectivity

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Performance Parameter	Data	Notes
Frequency range	2.0 to 18 GHz	Instantaneous coverage
Frequency measurement	1MHz	Accuracy < 4.5MHz rms
Azimuth coverage	360 dg	Switched LHCP / RHCP arrays
Bearing measurement	<3° rms (Tx Antenna V or H pol)	System performance as measured in an anechoic chamber
Amplitude measurement	0.1 dB	System sensitivity performance at antenna boresight. Sensitivity is reduced if optional protection elements or filters are installed.
Instantaneous dynamic range	60dB	
Minimum pulse width	70ns (50ns at reduced POI)	Max Pulse Width is 650 µs / CW
Time of arrival	5ns	Measurement Resolution
Recovery time	300ns typical	
Environment pulse density	> 1 million pulses per sec	Peak Density
Emitter library capacity	5,000 emitter mode lines	Capable of expansion
Track table	500 simultaneous tracks	Capable of expansion
Track display	500 simultaneously displayed	30 with a compact display
Full ESM MMI display modes	Map, Polar, Graph displays showing emitter LOB. Track Table, platform data, weapon data	
System response time	< 1 second	Antenna to display
Operating voltage range	9 VDC to 36 VDC; 95 VAC to 265 VAC (Optional EZ020 Power Supply)	24V DC optimal
Power consumption	150W 120W	Max typical at start up Max typical in operation
Size	Diameter 362 mm, Height 172.5 mm Height increases by 40 mm for standard filter bypass module Other optional filter dimensions on request	MTU (each)
Weight	< 12kg < 3kg	MTU (Each) Laptop
Operating temperature range	-40°C to + 55°C	
Operating altitude	60,000 feet max	

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SYSTEM OPTIONS

Phobos QR020-M10

Remote Operation

Via platform data link

RF front-end interface rejection

Custom filtering solutions available to suit requirement

EZ020 Smart PSU

AC operation + 4 platform blanking inputs

End-to-End RF Interruptive BIT

Active RF BIT source for RF Front End

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