



## **BPS-730 LPI NAVIGATION/ SURVEILLANCE RADAR FOR SUBMARINES**

The BPS-730 has been developed to meet the complex requirements of submarine installation. Utilising our experience in LPI radar we have developed a state-of-the-art, compact system, integrating both conventional high power Magnetron and coded pulse LPI architecture. This allows for the system to be active during covert operations as well as normal sailing.

### **VERSIONS**

- Up-mast transceiver, no waveguide installation, suitable for non hull-penetrating mast solutions
- Down-mast configuration, ideal for upgrade of existing submarines.

### **KEY FEATURES**

- On-board ESM interoperability
- Most efficient trade-off between long range detection and very low interceptability by Electronic Support Measures (ESM)
- Range scale up to 48 nmi and excellent minimum detection ranging
- Cosec<sup>2</sup> pattern antenna allows air surveillance against Anti Submarine Warfare (ASW) helicopters
- Power management allows BPS-730 to be employed in various operative conditions and to meet different interceptability requirements
- Includes ARPA and AIS function IMO compliant.

### **CODED PULSE LPI ARCHITECTURE**

The innovative and proprietary coded pulse LPI architecture gives several advantages over conventional LPI FMCW radar:

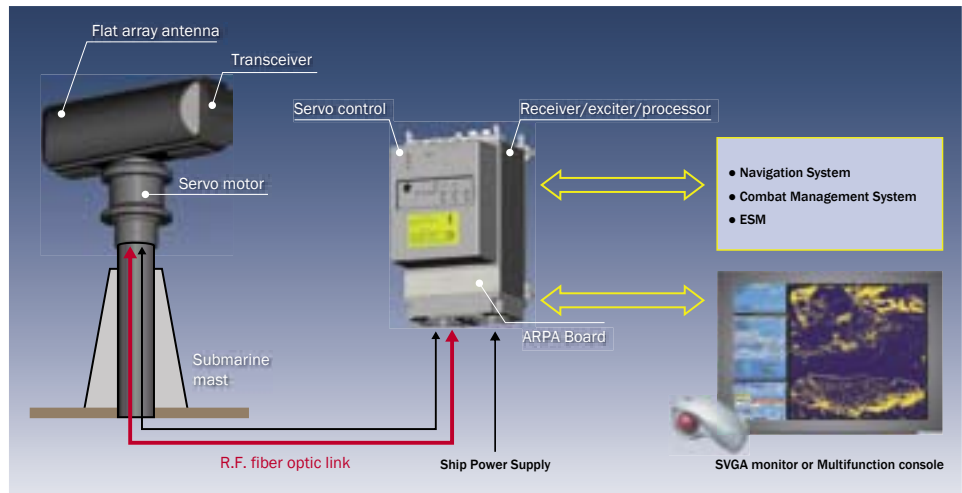
- Compatibility (interfacing) with on-board ESM allowing simultaneous operations
- Capability to operate in narrow water without radar saturation and loss of resolution
- Higher resistance to ELINT classification
- Greater immunity to ECM.

### **OPTIONS**

- High resolution in range (up to 1.5 metres) in a selected area of the radar map
- Additional doppler processing package to detect small naval targets moving in heavy clutter and to improve air targets detection
- Single scan hovering helicopter detection and classification.

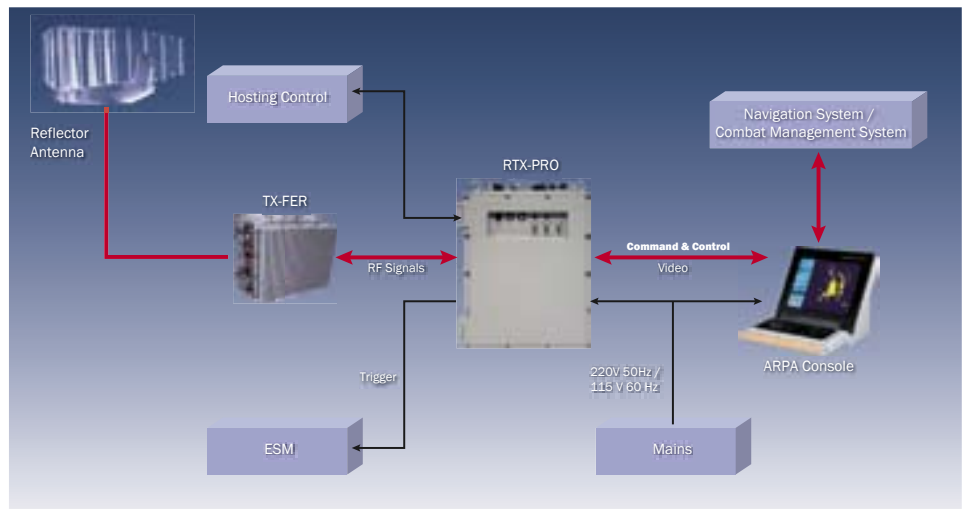
**UP-MAST VERSION**

- Only two units for compact and easy installation; the antenna/transceiver group integrated with the mast uses a fibre optic RF link
- Simply operated with only SVGA 1280x1024 video output and trackball interface
- Visual, Windows-like Man Machine Interface, without the need for a special keyboard.



**DOWN-MAST VERSION**

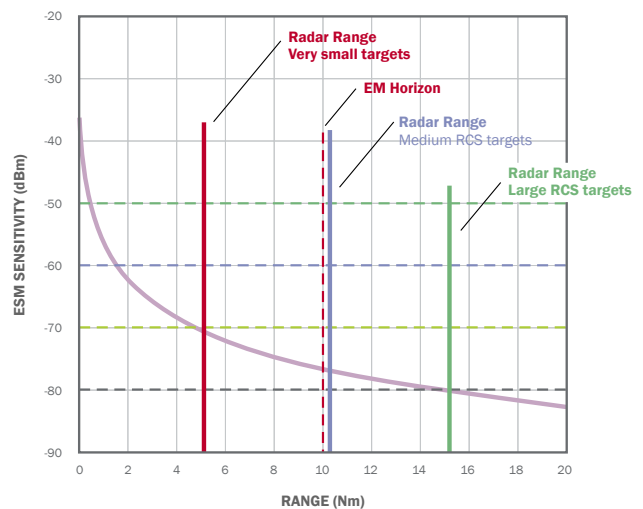
- Down Mast version is suitable to be integrated also with existing antenna
- Console can be integrated in multifunction one.



**MAIN CHARACTERISTICS**

- I- Band
- IMO standard range scales
- Up to 48 NM OTH surveillance range scale
- Very low peak power further reduced with power management
- Pulse codification, frequency agility, jittered PRF- LPI
- High resistance to ECM
- State-of-the-art technology and system architecture
- Fiber optic cabling
- Pulsed Solid State TX + Pulsed Magnetron type TX
- Flat array Antenna – Elevation Beamshape cosec<sup>2</sup>
- Single conversion digital demodulated receiver
- Intrinsic coherent architecture with potential doppler capability
- Very high pressure resistance (outdoor units)
- High shock and wave slap survivability

BPS-730 INTERCEPTABILITY



For more information please email [sales.marketing@selexgalileo.com](mailto:sales.marketing@selexgalileo.com)

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