



HENSOLDT Mk11/IFF Combined Antenna

The Kelvin Hughes Mk11 X band radar has been combined with the HENSOLDT IFF antenna, to provide an integrated turning unit, bringing SharpEye surveillance radar capability together with an IFF antenna system.

Features

- Solid state transceiver
- Fully coherent Doppler radar
- Self-contained upmast solution
- Industry standard digital open architecture
- Low maintenance

Benefits

- High reliability and MTBF
- Advance clutter processing and small target detection
- Ease of installation. Single turning unit
- Ease of integration and future capability increments
- Full BITE capability
- Low through life costs

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Two Systems, One Antenna

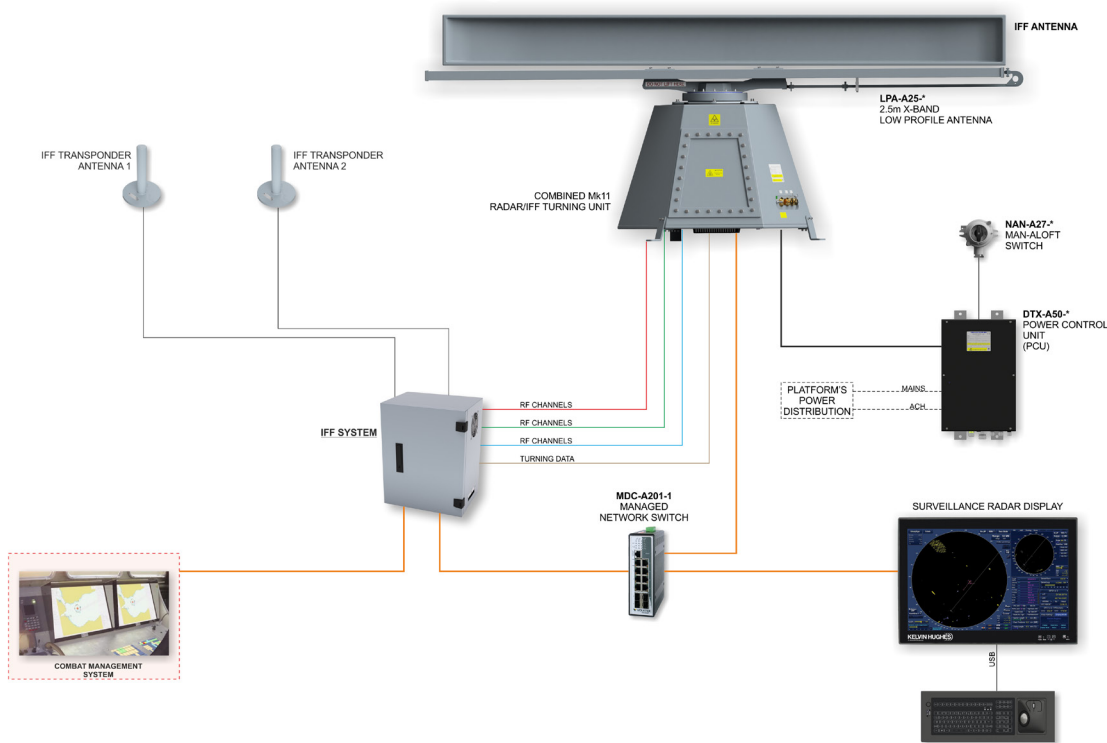
The Mk11 SharpEye X band radar is a well proven naval surveillance radar. The superior performance and reliability is achieved with the solid state electronics and patented technology in the SharpEye™ transceiver. The modern turning unit is constructed of carbon fibre and has a direct drive motor system to eliminate the traditional gearbox.

This low maintenance unit has now been enhanced with the addition of the IFF antenna. This is designed to meet the challenge of smaller vessels, used by navies, coastguards and border agencies, providing high performance in all conditions, whilst reducing the space required.

Description

The Mk11/IFF antenna system is configured as a single upmast system with the SharpEye™ transceiver sensor integrated in to the antenna turning unit so removing any need for a downmast housing. SharpEye™ transceivers are fully coherent providing greater capability and situational awareness through digital pulse compression and pulse Doppler processing.

The IFF antenna is co-mounted on the X band antenna and is rotated by the common motor drive. All IFF data is transferred into the IFF system on-board the vessel.



	Mk11 X-band Radar	IFF Antenna
Band	X-Band	L-Band
Operating Frequency	9.21 - 9.49 GHz	1090 & 1030 MHz
Channels Peak Power	300 Watts	1.5kW
Maximum Instrumented Range	48NM	256NM
Minimum Range	≤50m	0.125NM
Range Cell Size	15m	≤30m
Blanking Sectors	Up to 4 sectors	63
Antenna Size	2.5m	2.5m
Antenna Gain	31.0 dB	16 dBi
Polarisation	Horizontal	Vertical
Upmast Weight	230kgs	
Output data & Control	Asterix CAT240 & CAT253	Asterix CAT048, CAT253, CAT034, CAT018

All parameters are nominal and indicative based on a typical radar configuration.