

# BROADBAND C5ISR MARITIME COMMUNICATIONS

High Capacity Radio and Smart Antenna System





## HIGH-THROUGHPUT INTELLIGENCE

Today's manned and unmanned maritime operations demand greater ISR and C5 capabilities. The RF-7850W and RF-AT30X Smart Antenna answer those challenges with a rapid-deployment system delivering high-capacity IP data.

This compact, lightweight solution provides low-latency, near real-time data sharing, roaming, multi-hop relay, failover and rapid-beam technologies to ensure continuous communications.

### Comprehensive Asset Security

The system features ongoing communications to monitor and enhance C5ISR and sensor data to protect seaport areas, national safety, free flow of commerce and the critical security of oil, gas and other national interests.

#### **KEY BENEFITS**

- > Over 230 Mbps ISR video and IP data throughput
- > Transmissions secured through a proprietary L3Harris security suite
- > Passive interference avoidance through enhanced interference mitigation
- > Resilient and anti-jam waveforms reduce adversarial intercept
- > Advanced electronic beam steering provides increased gain and decreased adversarial detection



## UNRIVALED DATA RATES FOR CRUCIAL COMMUNICATIONS

RF-7850W Radio and Smart Antenna System

#### FALCON III® RF-7850W HIGH-CAPACITY RADIO

Ruggedized for harsh maritime conditions, the L3Harris RF-7850W High-Capacity Radio provides robust wireless broadband connectivity. Roaming and multi-hop relay technologies are ideal for sharing high-definition ISR video and C4I data while cruising.

- > Individual channel communications expanded through 2x2 MIMO
- > Ethernet data rates up to 430 Mbps (fixed) and to up to 180 Mbps (hopping)
- > Best-in-class spectrum efficiency and coverage
- > Encrypted, secure communications and anti-jam protection
- > Software defined with simplified web GUI
- > Non-ITAR RF-7800W variant available



#### RF-7800W-AT30X ELECTRONICALLY BEAM-STEERED SMART ANTENNA

Operating in high sea states, the smart antenna provides full  $360^\circ$  coverage and up to three times the user throughput of legacy products.

Antenna elements are radio-controlled, supporting the dynamic selection of a focused beam for consistent high-throughput connectivity to one or multiple radios. This smart antenna is easy to install and MIL-STD ruggedized against shock, vibration, sand, dust, salt fog, immersion and humidity.

- > Rapid beam switching supports a seamless connection among multiple links
- > Full functionality in GPS-denied environments
- > Enhanced tracking of moving vessels
- > Focused directional beam decreases RF signature and probability of detection
- > 13 dbi focused gain per beam
- > Wide range of other directional, sector and omni antennas available



### FAST. FORWARD.

#### **Broadband C5ISR Maritime Communications**

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