INDERA MX-3AH is an X-band naval radar system featuring solid-state FMCW (Frequency-Modulated Continuous-Wave) technology with very low transmit power and frequency agility, making INDERA MX-3AH a true Low-Probability-of-Intercept (LPI) radar. INDERA MX-3AH is the third generation in the INDERA MX radar series with improved hardware and software implementations. It utilizes state-of-the-art hardware technology and advanced signal processing techniques which lead to superior capability in detection of surface targets.

INDERA MX-3AH is equipped with tracking software MATA® (MAritime Tracking Aid) to include ARPA functionality, AIS, ECDIS, GPS and compass, enabling INDERA MX-3AH to serve as an independent stand-alone on-board navigation system. INDERA MX-3AH is a quiet naval radar which allows you to see without being seen...

**FEATURES**

- X-band naval LPI radar
- Solid-state FMCW technology
- 5 Watt max. transmit power
- Frequency agility
- ARPA functionality using MATA®
- North-up, head-up, course-up, true motion
- Integrated electronic chart ECDIS
- Integrated AIS, GPS and compass
- Stand-alone navigation capability
- Doppler FFT processing

**SPECIFICATIONS**

### ANTENNA
- **Type**: Dual TX-RX reflector antenna
- **Feed**: Microstrip patch array
- **Gain**: 23 dB
- **Beamwidth**: 1.6° (hor.), 20° (vert.)
- **10° side lobes**: < -20 dB
- **TX-RX isolation**: > 65 dB
- **Rotation speed**: 20 rpm max.
- **Length**: 169 cm

### TRANSCEIVER
- **Carrier freq.**: X-band
- **Bandwidth**: 60 MHz
- **PRF**: 2 kHz
- **Freq. agility rate**: 2 kHz (sweep-to-sweep)
- **Transmit power**: Surveillance mode: 5 W max. LPI mode: 2 W – 1 mW
- **Max. range**: 20 nm @ 5 W transmit power
- **ESM range**: < 1.5 nm @ 1 W transmit power
- **RX noise figure**: 1.7 dB
- **ADC resolution**: 14 bits
- **Range cells**: 512 cells
- **Processing**: Range FFT, Doppler FFT, CFAR
- **OS**: Windows / Linux

*Tested with ESM DR3000ULC @ -70 dBm sensitivity

### DISPLAY / ARPA
- **Display unit**: 19" Color VGA (1280 x 1024 pixels)
- **Color schemes**: Navy, daylight, red, green, amber, default
- **Range scales**: 0.25, 0.5, 0.75, 1, 1.5, 2, 3, 4, 6, 8, 10, 12, 14, 16, 20 nm
- **Range resolution**: 0.9 meter max., 72 meter min.
- **Number of rings**: Customizable (20 rings max.)
- **Azimuth mode**: North-up, head-up, course-up, true motion
- **#EBL / VRM**: 2 lines / 2 markers
- **#Guard zone**: 4 zones
- **Acquisition**: Automatic or manual of 200 targets max.
- **Tracking**: Automatic or manual of 200 targets max.
- **Vector prediction**: Speed & direction prediction within 100 minutes
- **Past position**: 20 past positions of targets at intervals of 1 minute
- **CPA/TCPA limits**: 0.1 to 15 nm / 0 to 120 minutes
- **Chart overlay**: Electronic chart system ECDIS S-57 / S-63

### PHYSICAL CHARACTERISTICS
- **Dimensions**: 169 cm (length) x 58 cm (width) x 107 cm (height)
- **Total weight**: 170 kg (outdoor unit)
- **Wind load**: 70 kts relative wind speed

### OTHERS
- **Bearing data**: Digital encoder
- **Peripherals**: AIS, GPS, compass, NMEA 0183 interface

---

**INDERA MX-3AH** X-BAND NAVAL LPI RADAR

**RADAR & COMMUNICATION SYSTEMS**

Segitiga Emas Business Park, Jalan Prof. Dr. Satrio Kav. 6, Jakarta 12940, Indonesia

Phone: +62-21-57951132 | Fax: +62-21-57951128 | Email: info@RCS-247.com | Web: www.RCS-247.com