

INDERA SX-2 is an X-band airport surface movement radar system featuring solid-state FMCW (Frequency-Modulated Continuous-Wave) technology with very low transmit power, making **INDERA SX-2** a quiet radar which will virtually cause no interference to other electronic systems. **INDERA SX-2** operates with frequency agility which increases detection accuracy while at the same time makes **INDERA SX-2** highly invulnerable to interference from other radars. **INDERA SX-2** implements state-of-the-art hardware technology and advanced signal processing techniques which lead to superior capability in detection of surface targets. **INDERA SX-2** is equipped with tracking and Doppler functionalities, high-speed rotating antennas and electronic map, enabling it to perform reliable surveillance of on-ground objects within the airport. **INDERA SX-2** gives a clean picture of all on-ground movements of aircraft and vehicles in the runway area. To extend the radar coverage, a number of **INDERA SX-2** radars can be integrated in a radar network using radar networking system **IRNET®** (**INDERA** Radar NETWORK).

FEATURES

- Airport surface movement radar
- Solid-state FMCW technology
- Very low transmit power (2 Watt)
- LPI characteristics
- Frequency agility
- High-speed antenna rotation (60 rpm)
- Track-while-scan of 50 targets
- Doppler speed up to 287 km/h (178 mph)
- Integrated electronic map of the runway area
- Radar networking system **IRNET®**



SPECIFICATIONS

ANTENNA

Type	Dual TX-RX reflector antenna
Feed	Microstrip patch array
Gain	> 40 dBi
Beamwidth	0.6° (hor.), 20° (vert.)
1 st side lobes	< -20 dB
TX-RX isolation	> 70 dB
Rotation speed	60 rpm
Length	384 cm

TRANSCEIVER

Carrier freq.	X-band
Bandwidth	60 MHz
PRF / Beat freq.	10 kHz / 1 MHz
Freq. agility	Sweep-to-sweep (10 kHz)
Transmit power	2 W
RX noise figure	1.7 dB
Noise floor	-114 dBm
ADC resolution	16 bits
Range cells	512 cells
Processing	Range FFT & Doppler FFT
Doppler speed	287 km/h (178 mph) max
OS	Linux

DISPLAY

Display unit	23" Color VGA 1280 x 1024 pixels
Color schemes	Daylight, red, green, amber, customizable
Range scales	0.25, 0.5, 0.75, 1, 1.5, 2, 3, 4, 5, 6, 8, 10 km
Range resolution	0.5 m max.
Number of rings	5 rings
Azimuth mode	North-up, head-up
EBL / VRM	2 lines / 2 markers
Guard zone	3 zones
Ignored zone	3 zones
Tracking	Track-while-scan of 50 targets max.
Chart	Electronic geographical map system

PHYSICAL CHARACTERISTICS

Dimensions	384 cm (l) x 35 cm (w) x 86 (h) cm
Weight	160 kg (80 kg rotor + 80 kg stator)
Wind speed	< 120 km/h
Temperature	-25° to +50° C
Casing	All weather resistant (IP65)

OTHERS

Power supply	Automatic voltage regulator + UPS
Bearing data	Digital encoder