

**SPECIFICATIONS OF RADAR SENSOR  
DRS12A X-Class**

**1 ANTENNA UNIT**

- 1.1 Antenna type Slotted waveguide array
- 1.2 Antenna length 4 ft (XN12A), 6 ft (XN13A)
- 1.3 Horizontal beam width 1.9° (XN12A), 1.35° (XN13A)
- 1.4 Vertical beam width 22°
- 1.5 Gain 28.5 dBi (XN12A), 30 dBi (XN13A)
- 1.6 Sidelobe attenuation
  - XN12A -24 dB (within ±10°), -30 dB (±10° or more)
  - XN13A -28 dB (within ±10°), -35 dB (±10° or more)
- 1.7 Rotation 24/36/48 rpm range coupled or 24 rpm fixed
- 1.8 Relative wind load 70 kn or less

**2 RADAR FUNCTION**

- 2.1 Tx frequency 9410 ±30 MHz
- 2.2 Output power 12 kW nominal
- 2.3 Duplexer Ferrite circulator with diode limiter
- 2.4 Intermediate frequency 60 MHz
- 2.5 Range, Pulse length and Pulse Repetition Rate (PRR)

Range (NM)	Pulse length (μs)	PRR (Hz. approx.)
0.0625 to 0.75	0.08	3000
1 to 1.5	0.15	3000
2	0.3	1500
3 to 4	0.5	1000
6 to 8	0.8	600
12 to 64	1.2	600
72 to 96	1.2	550

- 2.6 Minimum range 25 m
- 2.7 Range resolution 20 m
- 2.8 Range accuracy Within 1% of range in use
- 2.9 Bearing resolution 1.9° (XN12A), 1.4° (XN13A)
- 2.10 Bearing accuracy Within ±1°
- 2.11 Warm-up time 90 s approx.
- 2.12 Target tracking (TT) Auto or manual acquisition: 30 targets between 0.1 NM and 16 NM  
Past position: 5/10 pts on all activated targets  
Vector time: 1 to 60 min.

**3 INTERFACE**

LAN: 1 port, Ethernet, 100Base-TX

**4 POWER SUPPLY**

24 VDC: 4.5 A

## 5 ENVIRONMENTAL CONDITIONS

- 5.1 Ambient temperature -25°C to +55°C (storage: -30°C to +70°C)
- 5.2 Relative humidity 95% or less at +40°C
- 5.3 Degree of protection IP56
- 5.4 Vibration IEC 60945 Ed.4

## 6 UNIT COLOR

N9.5