

**SPECIFICATIONS OF RADAR SENSOR
DRS6A-NXT**

1 ANTENNA UNIT

- 1.1 Antenna type Slotted waveguide array
- 1.2 Antenna length 3.4 ft (XN10A), 4 ft (XN12A), 6 ft (XN13A)
- 1.3 Horizontal beam width 2.3° (XN10A), 1.9° (XN12A), 1.35° (XN13A)
- RezBoost effective beam width*
 1.15° to 2.3° (XN10A), 0.95° to 1.9° (XN12A), 0.7° to 1.35° (XN13A)
- *: RezBoost provides better echo resolution, in a manner similar to adjusting the beam width.
- 1.4 Vertical beam width 22°
- 1.5 Gain 27.5 dBi (XN10A), 28.5 dBi (XN12A), 30 dBi (XN13A)
- 1.6 Sidelobe attenuation
- XN10A -20 dB (within ±10°), -28 dB (±10° or more)
- XN12A -27 dB (within ±10°), -34 dB (±10° or more)
- XN13A -29 dB (within ±10°), -37 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 3 channel, auto/manual selectable
- Ch.1 (P0N/Q0N) 9380/9400 MHz
- Ch.2 (P0N/Q0N) 9400/9420 MHz
- Ch.3 (P0N/Q0N) 9420/9440 MHz
- 2.2 Output power 25 W
- 2.3 Duplexer Ferrite circulator with diode limiter
- 2.4 Intermediate frequency 83.75/103.75 MHz (P0N/Q0N)
- 2.5 Range, Pulse length and Pulse Repetition Rate (PRR)

Range (NM)	Pulse length [P0N/Q0N] (μs)	PRR (Hz. approx.)
0.0625	0.04/5.0	2000
0.125 to 0.75	0.08/5.0	2000
1 to 1.5	0.15/7.5	2000
2	0.3/11	2000
3 to 4	0.5/13	2000
6 to 8	0.8/15	1100
12 to 24	1.2/18	1100
32 to 72	1.2/48	700

- 2.6 Minimum range 10 m
- 2.7 Range resolution 10 m
- 2.8 Range accuracy Within 1% of range in use
- 2.9 Bearing accuracy Within ±1°
- 2.10 Warm-up time Nil
- 2.11 Target tracking (TT) Auto or manual acquisition: 100 targets between 0.1 and 24 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

12/24 VDC: 9.5/5.0 A max.

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