

**SPECIFICATIONS OF RADAR SENSOR  
DRS4D-NXT**

**1 RADIATOR**

- 1.1 Antenna type Patch array antenna
- 1.2 Antenna length 22-inch
- 1.3 Horizontal beam width 3.9° typical (-3dB)  
RezBoost effective beam width\* 2.0° to 3.9°  
\*: RezBoost provides better echo resolution, in a manner similar to adjusting the beam width.
- 1.4 Vertical beam width 25° (-3dB)
- 1.5 Sidelobe attenuation -24 dB
- 1.6 Rotation 24/36/48 rpm coupled with range or 24 rpm fixed (select)

**2 RADAR FUNCTION**

- 2.1 Tx frequency

| Ch # | P0N (MHz) | Q0N (MHz) |
|------|-----------|-----------|
| 1    | 9380      | 9400      |
| 2    | 9400      | 9420      |
| 3    | 9420      | 9440      |

- 2.2 Output power 25 W nominal (equivalent to 4kW magnetron radar)
- 2.3 Intermediate frequency 83.75/103.75 MHz
- 2.4 Range, Pulse length and Pulse Repetition Rate (PRR)

| Range (NM)    | Pulse length (μs)<br>(non-modulated/modulated) | PRR<br>(Hz approx.) |
|---------------|--|---------------------|
| 0.0625 to 0.5 | 0.08/5.0                                       | 1100                |
| 0.75 to 1     | 0.15/7.5                                       |                     |
| 1.5 to 2      | 0.3/11   |                     |
| 3 to 4        | 0.6/13   |                     |
| 6 to 12       | 1.2/15   |                     |
| 16 to 36      | 1.2/18   |                     |

- 2.5 Minimum range 20 m
- 2.6 Range resolution 20 m
- 2.7 Bearing accuracy ±1°
- 2.8 Warm-up time Null

**3 INTERFACE**

- 3.1 Number of port LAN: 1 port, Ethernet, 100Base-TX, RJ45
- 3.2 Data sentences IEC61162-1/2  
Input GGA, GLL, GNS, HDG, HDM, HDT, RMA, RMC, THS, VHW, VTG

**4 POWER SUPPLY**

12-24 VDC: 2.5-1.3 A

**5 ENVIRONMENTAL CONDITIONS**

- 5.1 Ambient temperature -25°C to +55°C (storage: -30°C to +70°C)
- 5.2 Relative humidity 93% or less at +40°C
- 5.3 Degree of protection IP26
- 5.4 Vibration IEC 60945 Ed.4

**6 UNIT COLOR**

N9.5 (cover), PANTONE2945C (bottom)