

|                       |             |
|-----------------------|-------------|
| Frequency Range       | 617-894x2   |
|                       | 1695-2690x2 |
|                       | 3300-4200x2 |
| Polarization          | ±45°        |
| Half-Power Beam Width | 65°         |
| Electrical Downtilt   | 2° - 12°x6  |

Type DOD6-2A2J2R-RF65

## Base Station Antenna

12-ports 617-894 / 617-894 /1695-2690 / 1695-2690/ 3300-4200 / 3300-4200 MHz 65°, 15 /15 /18 /18 /18 /18 dBi, 2°-12° /2°-12° / 2°-12° / 2°-12° / 2°-12° / 2 - 12 °Tilt Antenna With 6 Integrated RCUs.

### Electrical Specifications

| Frequency Range(MHz)                           |                     | 2x617-894                   |         |         | 2x1695-2690 |           |           |           | 2x3300-4200 |           |
|------------------------------------------------|---------------------|-----------------------------|---------|---------|-------------|-----------|-----------|-----------|-------------|-----------|
|                                                |                     | 617-698                     | 698-824 | 824-894 | 1695-1920   | 1920-2180 | 2300-2400 | 2490-2690 | 3300-3800   | 3800-4200 |
| Polarization                                   |                     | ±45°                        |         |         |             |           |           |           |             |           |
| Horizontal 3dB Beamwidth(°)                    |                     | 70                          | 65      | 60      | 66          | 63        | 58        | 60        | 68          | 64        |
| Vertical 3dB Beamwidth(°)                      |                     | 14.5                        | 12.5    | 11      | 7.5         | 6.5       | 6         | 5.5       | 6.8         | 6         |
| Gain (dBi)                                     |                     | 13.9                        | 14.4    | 14.9    | 16.5        | 17        | 17.5      | 17.8      | 17          | 17.5      |
| Electrical Downtilt                            |                     | 2°-12°                      |         |         | 2°-12°      |           |           |           | 2°-12°      |           |
| Upper Sidelobe Suppression(dB)                 | First               | ≥16                         | ≥16     | ≥16     | ≥16         | ≥16       | ≥16       | ≥16       | ≥16         | ≥16       |
| Front-to-Back Ratio<br>Total Power, ± 30° (dB) |                     | ≥23                         | ≥24     | ≥25     | ≥25         | ≥25       | ≥25       | ≥25       | ≥25         | ≥25       |
| Cross polar ratio                              | Main direction (dB) | ≥17                         | ≥17     | ≥17     | ≥17         | ≥17       | ≥17       | ≥17       | ≥17         | ≥17       |
|                                                | ± 60° (dB)          | ≥7                          | ≥7      | ≥7      | ≥7          | ≥7        | ≥7        | ≥7        | ≥7          | ≥7        |
| Isolation ports                                |                     | ≥25 dB                      |         |         |             |           |           |           |             |           |
| Isolation Frequency                            |                     | ≥30 dB                      |         |         |             |           |           |           |             |           |
| VSWR                                           |                     | < 1.5                       |         |         |             |           |           |           |             |           |
| Intermodulation IM3                            |                     | < -150 dBc(2x43dBm carrier) |         |         |             |           |           |           |             |           |
| Impedance                                      |                     | 50 Ω                        |         |         |             |           |           |           |             |           |
| Max. Power per Input<br>(at 50°C ambient       |                     | 500 W                       |         |         | 300 W       |           |           |           | 250 W       |           |
| Lightning Protection                           |                     | DC Ground                   |         |         |             |           |           |           |             |           |



### Mechanical Specifications

|                                                   |                                                                            |
|---------------------------------------------------|----------------------------------------------------------------------------|
| Radome Material                                   | ASA                                                                        |
| Connector Type and Location                       | 4.3-10x12, Bottom<br>iRCU in: 1 x 8 pin male<br>iRCU out: 1 x 8 pin female |
| Dimensions, HxWxD(mm)/(inches)                    | 1850 x 499 x 180 / 72.8 x 19.6 x 7.1                                       |
| Packing Size(mm)/(inches)                         | 2160 x 600 x 310 / 85 x 23.6 x 12.2                                        |
| Weight ,w/o Mounting kit(kg)/(lbs)                | 33.5 / 73.7                                                                |
| Weight w/ Downtilt Bracket(kg)/(lbs)              | 39.5 / 86.9                                                                |
| Weight w/ Fixed Bracket(kg)/(lbs)                 | 37.5 / 82.5                                                                |
| Packing Weight (w/ Downtilt Bracket) (kg)/(lbs)   | 48.5 / 106.7                                                               |
| Packing Weight (w/ Fixed Bracket) (kg)/(lbs)      | 46.5 / 102.3                                                               |
| Max. Wind Velocity(mph)                           | 150                                                                        |
| Mounting hardware                                 | ϕ 50 mm ~ ϕ 115 mm                                                         |
| Operational Temperature(°C)                       | -40 to +65                                                                 |
| Operational Humidity(%)                           | <95                                                                        |
| Wind Load at 100mph (Frontal/lateral/Rearside(N)) | 1065/237/767                                                               |

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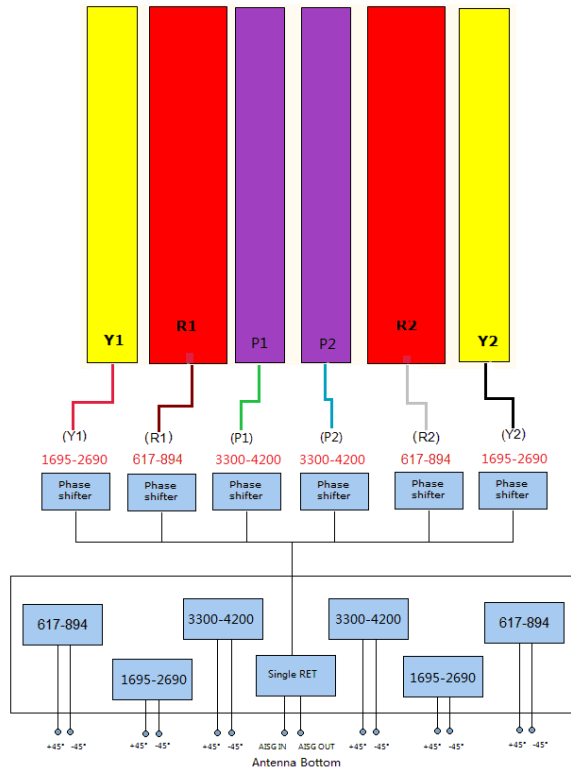
|                       |             |
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| Electrical Downtilt   | 2° - 12°x6  |

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### Integrated RET Properties

|                             |                                                                                                                                                           |                                                                                                      |
|-----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|
| RET Type                    | 6x Type 1 Single RET                                                                                                                                      |                                                                                                      |
| Protocols                   | Compliant to AISG 2.0/3GPP                                                                                                                                |                                                                                                      |
| Input voltage range         | +10~+30VDC(pin 6)                                                                                                                                         |                                                                                                      |
| Power consumption           | <2W(stand by);<13W(motor activated)                                                                                                                       |                                                                                                      |
| Connectors                  | AISG                                                                                                                                                      | 2 x 8 pin connector acc. To IEC 60130-9<br>Acc.to AISG Daisy chain in:male<br>Daisy chain out:female |
|                             | Antenna                                                                                                                                                   | Two motor shaft(Embedded motor)                                                                      |
| Hardware interface          | AISG                                                                                                                                                      | RS485A/B(pin5/pin3);Power supply(pin6);<br>DC return(pin7)Acc.to AISG                                |
| Adjustment time(full range) | 40 sec(typically,depending on antenna)                                                                                                                    |                                                                                                      |
| Adjustment Cycles           | ≥10000                                                                                                                                                    |                                                                                                      |
| Torque Max                  | ≥160mN.m                                                                                                                                                  |                                                                                                      |
| Lightning Protection Rating | IEC 61000-4-5 Current Pulse Profile,8/20 μs 10 Repetitions Min.@ 6kA<br>IEC 61312-1 Annex B Current Pulse Profile, 10/350 μs,200 Repetitions Min. @ 0.6kA |                                                                                                      |

### COMPREHENSIVE TILT CONFIGURATION

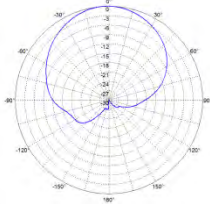


| Frequency Range | Array | RET Unique ID       |
|-----------------|-------|---------------------|
| 617-894MHz      | R1    | NDPMXXXXXXXX-6089R1 |
| 617-894MHz      | R2    | NDPMXXXXXXXX-6089R2 |
| 1695-2690MHz    | Y1    | NDPMXXXXXXXX-1727Y1 |
| 1695-2690MHz    | Y2    | NDPMXXXXXXXX-1727Y1 |
| 3300-4200MHz    | P1    | NDPMXXXXXXXX-3342P1 |
| 3300-4200MHz    | P2    | NDPMXXXXXXXX-3342P1 |

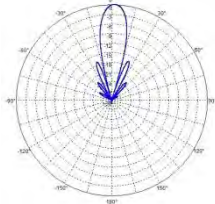
Note: (1) Physical RET Unit containing (6) Single RET

|                       |                               |
|-----------------------|-------------------------------|
| Frequency Range       | 617-894x2                     |
|                       | 1695-2690x2                   |
|                       | 3300-4200x2                   |
| Polarization          | $\pm 45^\circ$                |
| Half-Power Beam Width | $65^\circ$                    |
| Electrical Downtilt   | $2^\circ - 12^\circ \times 6$ |

Radiation Pattern (617 - 824 MHz)

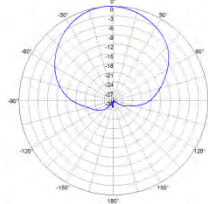


Horizontal Pattern

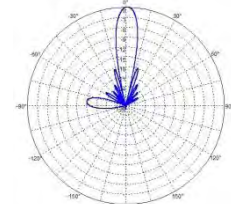


Vertical Pattern

Radiation Patterns (824 - 894 MHz)

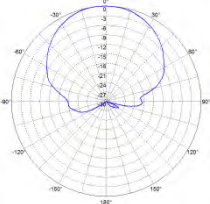


Horizontal Pattern

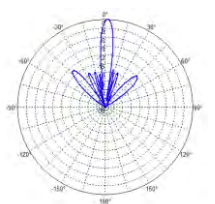


Vertical Pattern

Radiation Pattern (1695 - 2180 MHz)

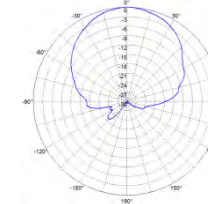


Horizontal Pattern

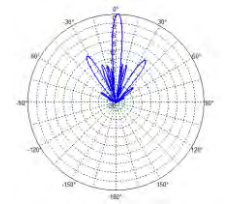


Vertical Pattern

Radiation Patterns (2300 - 2690 MHz)

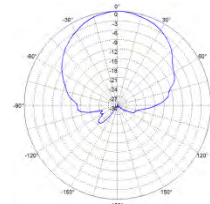


Horizontal Pattern

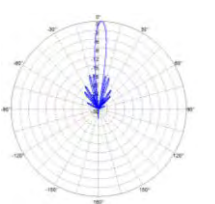


Vertical Pattern

Radiation Pattern (3300 - 3800 MHz)

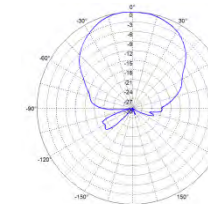


Horizontal Pattern

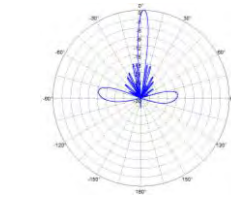


Vertical Pattern

Radiation Pattern (3800 - 4200 MHz)



Horizontal Pattern



Vertical Pattern