

|                       |             |
|-----------------------|-------------|
| Frequency Range       | 617-894x2   |
|                       | 1695-2400x2 |
|                       | 2400-2690x2 |
|                       | 3300-4200x2 |
| Polarization          | ±45°        |
| Half-Power Beam Width | 45°         |
| Electrical Downtilt   | 2° - 12°x8  |

## Type 2OCT6-2A2G2N2R-RH45

### Base Station Antenna

16-ports 617-894 / 617-894 /1695-2400 / 1695-2400/ 2400-2690/2400-2690/3300-4200 / 3300-4200 MHz 65°, 15.5 /15.5 /18.5 /18.5 /19 /19 /18.5/18.5 dBi, 2°-12° /2°-12° / 2°-12° / 2°-12° / 2°-12° / 2 - 12 °Tilt Antenna With 8 Integrated RCUs.

#### Electrical Specifications

| Frequency Range(MHz)                          |                     | 2x617-894                   |         |         | 2x1695-2400 |           |           | 2x2400-2690 | 2x3400-4200 |           |
|-----------------------------------------------|---------------------|-----------------------------|---------|---------|-------------|-----------|-----------|-------------|-------------|-----------|
|                                               |                     | 617-698                     | 698-824 | 824-894 | 1695-1920   | 1920-2180 | 2300-2400 | 2400-2690   | 3300-3800   | 3800-4200 |
| Polarization                                  |                     | ±45°                        |         |         |             |           |           |             |             |           |
| Horizontal 3dB Beamwidth(°)                   |                     | 50                          | 46      | 42      | 48          | 45        | 41        | 38          | 48          | 45        |
| Vertical 3dB Beamwidth(°)                     |                     | 14.5                        | 12.5    | 11      | 7.5         | 6.5       | 6         | 5.5         | 6.8         | 6         |
| Gain (dBi)                                    |                     | 14.4                        | 14.9    | 15.5    | 17.3        | 17.8      | 18.3      | 18.6        | 17.8        | 18.3      |
| Electrical Downtilt                           |                     | 2°-12°                      |         |         | 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) |                     | ≥25                         | ≥25     | ≥25     | ≥25         | ≥25       | ≥25       | ≥25         | ≥25         | ≥25       |
| Cross polar ratio                             | Main direction (dB) | ≥17                         | ≥17     | ≥17     | ≥17         | ≥17       | ≥17       | ≥17         | ≥17         | ≥17       |
|                                               | ±30° (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       |           |           | 300 W       | 250 W       |           |
| Lightning Protection                          |                     | DC Ground                   |         |         |             |           |           |             |             |           |



#### Mechanical Specifications

|                                                      |                                                                            |
|------------------------------------------------------|----------------------------------------------------------------------------|
| Radome Material                                      | ASA                                                                        |
| Connector Type and Location                          | 4.3-10x16, Bottom<br>iRCU in: 1 x 8 pin male<br>iRCU out: 1 x 8 pin female |
| Dimensions, HxWxD(mm)/(inches)                       | 1850 x 533 x 160 / 72.8 x 21.0 x 6.3                                       |
| Packing Size(mm)/(inches)                            | 2195 x 633 x 291 / 86.4 x 24.9 x 11.5                                      |
| Weight ,w/o Mounting kit(kg)/(lbs)                   | 39.5/ 86.9                                                                 |
| Weight w/ Downtilt Bracket(kg)/(lbs)                 | 45.5 / 100.1                                                               |
| Weight w/ Fixed Bracket(kg)/(lbs)                    | 43.5 / 95.7                                                                |
| Packing Weight (w/ Downtilt Bracket) (kg)/(lbs)      | 54.5 / 119.9                                                               |
| Packing Weight (w/ Fixed Bracket) (kg)/(lbs)         | 52.5 / 115.5                                                               |
| 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<br>(Frontal/lateral/Rearside(N)) | 1065/237/767                                                               |

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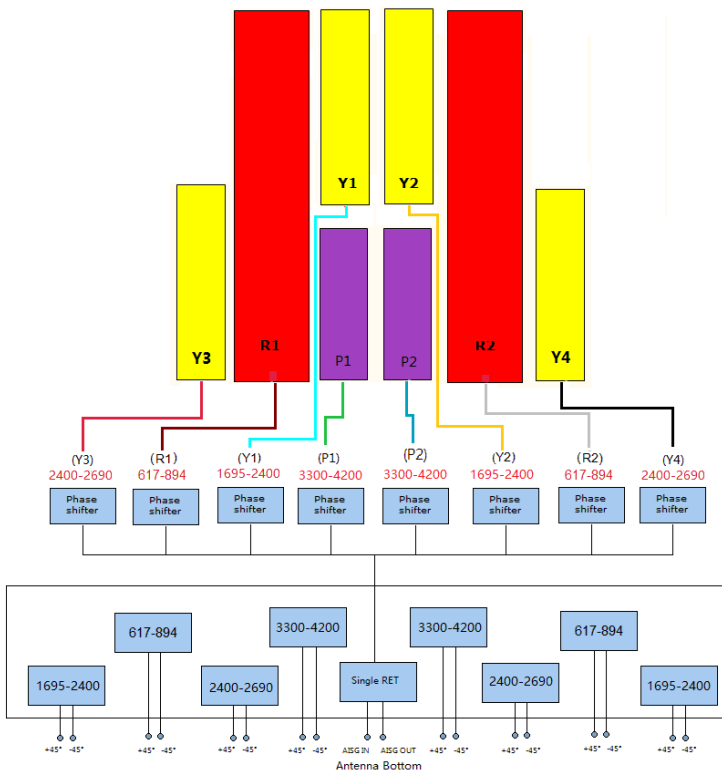
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### Integrated RET Properties

|                             |                                                                                                                                                           |                                                                                                      |
|-----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|
| RET Type                    | 8 x 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



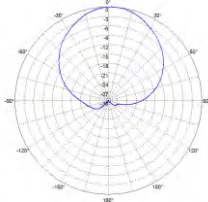
| Frequency Range | Array | RET Unique ID       |
|-----------------|-------|---------------------|
| 617-894MHz      | R1    | NDPMXXXXXXXX-6089R1 |
| 617-894MHz      | R2    | NDPMXXXXXXXX-6089R2 |
| 1695-2400MHz    | Y1    | NDPMXXXXXXXX-1724Y1 |
| 1695-2400MHz    | Y2    | NDPMXXXXXXXX-1724Y2 |
| 2400-2690MHz    | Y3    | NDPMXXXXXXXX-2427Y3 |
| 2400-2690MHz    | Y4    | NDPMXXXXXXXX-2427Y4 |
| 3300-4200MHz    | P1    | NDPMXXXXXXXX-3342P1 |
| 3300-4200MHz    | P2    | NDPMXXXXXXXX-3342P1 |

Note: (1) Physical RET Unit containing (8) Single RET

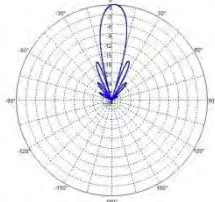
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Radiation Pattern (617 - 824 MHz)

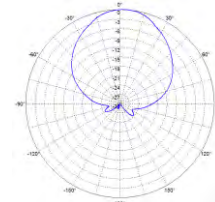


Horizontal Pattern

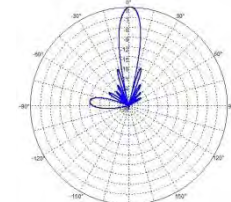


Vertical Pattern

Radiation Patterns (824 - 894 MHz)

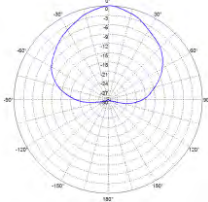


Horizontal Pattern

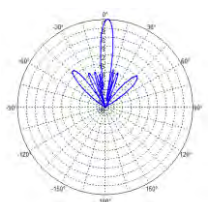


Vertical Pattern

Radiation Pattern (1695 - 2180 MHz)

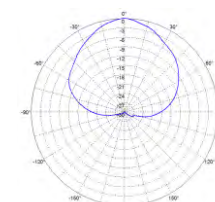


Horizontal Pattern

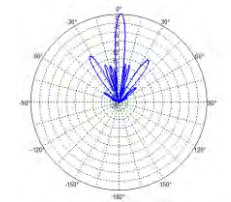


Vertical Pattern

Radiation Patterns (2300 - 2690 MHz)

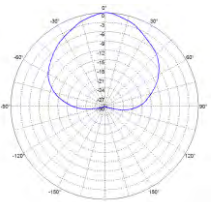


Horizontal Pattern

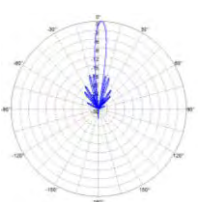


Vertical Pattern

Radiation Pattern (3400 - 3800 MHz)

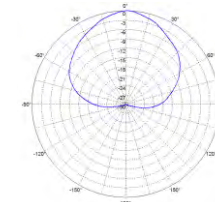


Horizontal Pattern

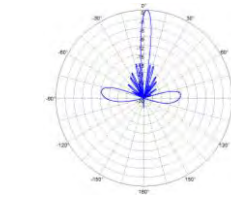


Vertical Pattern

Radiation Pattern (3800 - 4200 MHz)



Horizontal Pattern



Vertical Pattern