

|                       |                          |
|-----------------------|--------------------------|
| Frequency Range       | 617-894x2<br>1695-2690x4 |
| Polarization          | ±45°                     |
| Half-Power Beam Width | 65°                      |
| Electrical Downtilt   | 2° - 12°x6               |

Type DOD6-2LX4HX-BR65

## Base Station Antenna

12-ports 617-894 / 617-894 /1695-2690 /1695-2690 /1695-2690 /1695-2690 MHz 65°, 15 / 15 / 18.5 / 18.5 / 18.5 / 18.5 dBi, 2°-12° / 2°-12° / 2°-12° / 2 - 12 ° / 2°-12° / 2°-12 °Tilt Antenna With 3 Integrated RCUs.



### Electrical Specifications

| Frequency Range(MHz)                                  |       | 2x617-894 |         | 4x1695-2690 |           |           |           |           |
|-------------------------------------------------------|-------|-----------|---------|-------------|-----------|-----------|-----------|-----------|
|                                                       |       | 617-698   | 698-894 | 1695-1880   | 1850-1990 | 1920-2200 | 2300-2500 | 2500-2690 |
| Polarization                                          |       | ±45°      |         |             |           |           |           |           |
| Horizontal 3dB Beamwidth(°)                           |       | 68        | 62      | 66          | 65        | 62        | 58        | 60        |
| Vertical 3dB Beamwidth(°)                             |       | 14        | 12      | 5.7         | 5.5       | 5.1       | 4.5       | 4.1       |
| Gain (dBi)                                            |       | 14.2      | 15      | 17.6        | 18        | 18.5      | 18.5      | 18.6      |
| Electrical Downtilt                                   |       | 2°-12°    |         | 2°-12°      |           |           |           |           |
| Upper Sidelobe Suppression(dB)                        | First | ≥16       | ≥16     | ≥16         | ≥16       | ≥16       | ≥16       | ≥16       |
| Front-to-Back Ratio<br>Total Power, ± 30° (dB)        |       | ≥23       | ≥24     | ≥25         | ≥25       | ≥25       | ≥25       | ≥25       |
| Isolation ports                                       |       | ≥25dB     |         |             |           |           |           |           |
| Isolation Frequency                                   |       | ≥28dB     |         |             |           |           |           |           |
| VSWR                                                  |       | < 1.5     |         |             |           |           |           |           |
| Intermodulation IM3 dBc<br>(2x43dBm carrier)          |       | < -150    | < -153  | < -153      |           |           |           |           |
| Impedance                                             |       | 50 Ω      |         |             |           |           |           |           |
| Max. Power per Input<br>(at 50°C ambient temperature) |       | 500 W     |         | 200 W       |           |           |           |           |
| Lightning Protection                                  |       | DC Ground |         |             |           |           |           |           |



### Electrical Specifications,BASTA

| Frequency Range(MHz)                       |                    | 2x617-894 |           | 4x1695-2690 |           |           |           |           |
|--------------------------------------------|--------------------|-----------|-----------|-------------|-----------|-----------|-----------|-----------|
|                                            |                    | 617-698   | 698-894   | 1695-1880   | 1850-1990 | 1920-2200 | 2300-2500 | 2500-2690 |
| Polarization                               |                    | ±45°      |           |             |           |           |           |           |
| Beamwidth, Horizontal Tolerance (°)        |                    | ±4.2      | ±5.8      | ±3.5        | ±4.1      | ±6.4      | ±5.7      | ±6.0      |
| Beamwidth, Vertical Tolerance (°)          |                    | ±1.1      | ±1.4      | ±0.3        | ±0.4      | ±0.4      | ±0.3      | ±0.3      |
| Gain by all Beam Tilts,average, (dBi)      |                    | 14        | 14.4      | 17.4        | 17.7      | 18.2      | 18.2      | 18.2      |
| Gain by all Beam Tilts,Tolerance, (dB)     |                    | ±0.4      | ±0.7      | ±0.4        | ±0.4      | ±0.6      | ±0.5      | ±0.5      |
| Gain by all Beam Tilt,average (dBi)        |                    | 2   14.0  | 2   14.4  | 2   17.4    | 2   17.7  | 2   18    | 2   18.1  | 2   18.1  |
|                                            |                    | 7   14.2  | 7   14.5  | 7   17.5    | 7   17.8  | 7   18.3  | 7   18.5  | 7   18.5  |
|                                            |                    | 12   13.9 | 12   14.2 | 12   17.2   | 12   17.6 | 12   18.2 | 12   18.1 | 12   18.0 |
| Front-to-Back Ratio Total Power, ±30° (dB) |                    | ≥23       | ≥24       | ≥25         | ≥25       | ≥25       | ≥25       | ≥25       |
| Cross polar ratio                          | Main direction(dB) | ≥17       | ≥17       | ≥17         | ≥17       | ≥17       | ≥17       | ≥17       |
|                                            | ±60° (dB)          | ≥7        | ≥7        | ≥7          | ≥7        | ≥7        | ≥7        | ≥7        |

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

Type DOD6-2LX4HX-BR65

### Mechanical Specifications

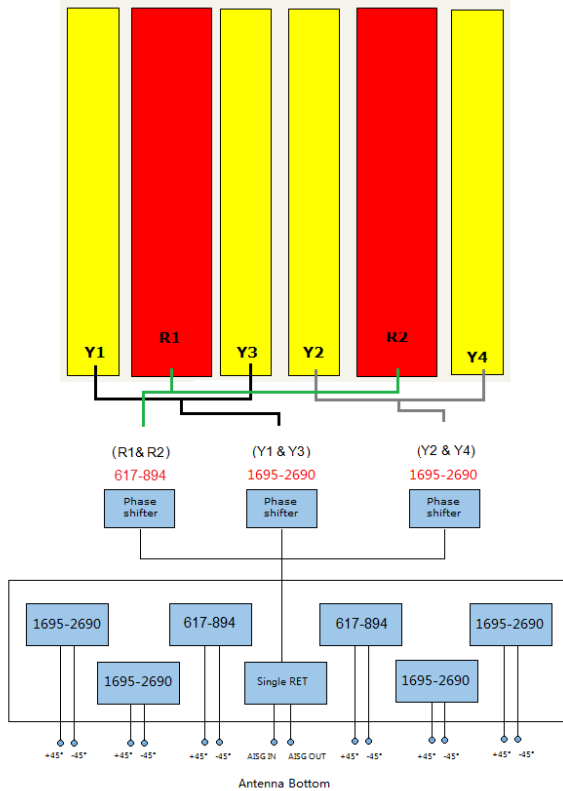
|                                                   |                                                                          |
|---------------------------------------------------|--------------------------------------------------------------------------|
| Radome Material                                   | 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 533 x 160 / 72.8 x 21.0x 6.3                                      |
| Packing Size(mm)/(inches)                         | 2195 x 633 x 291 / 86.4 x 24.9 x 11.4                                    |
| Weight ,w/o Mounting kit(kg)/(lbs)                | 35.5 / 78.1                                                              |
| Weight with Downtilt Bracket(kg)/(lbs)            | 42.5 / 93.5                                                              |
| Weight with Fixed Bracket(kg)/(lbs)               | 40.5 / 89.1                                                              |
| Packing Weight (with Downtilt Bracket) (kg)/(lbs) | 51.5 / 113.3                                                             |
| Packing Weight (with Fixed Bracket) (kg)/(lbs)    | 49.5 / 108.9                                                             |
| 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)) | 1138/211/819                                                             |

### Integrated RET Properties

|                             |         |                                                                                                                                                           |
|-----------------------------|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|
| RET Type                    |         | 3x 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 |

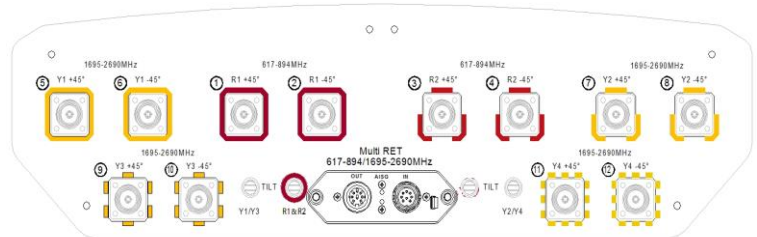
|                       |                          |
|-----------------------|--------------------------|
| Frequency Range       | 617-894x2<br>1695-2690x4 |
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| Electrical Downtilt   | 2° - 12°x6               |

## COMPREHENSIVE TILT CONFIGURATION



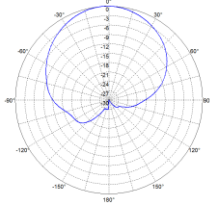
| Frequency Range | Array | RET Unique ID       |
|-----------------|-------|---------------------|
| 617-894MHz      | R1/R2 | NDPMXXXXXXXX-6089R1 |
| 1695-2690MHz    | Y1/Y3 | NDPMXXXXXXXX-1727Y1 |
| 1695-2690MHz    | Y2/Y4 | NDPMXXXXXXXX-1727Y2 |

Note: (1) Physical RET Unit  
containing (3) Single RET

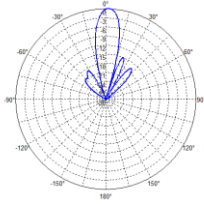


|                       |                               |
|-----------------------|-------------------------------|
| Frequency Range       | 617-894x2<br>1695-2690x4      |
| Polarization          | $\pm 45^\circ$                |
| Half-Power Beam Width | $65^\circ$                    |
| Electrical Downtilt   | $2^\circ - 12^\circ \times 6$ |

Radiation Pattern (617 - 824 MHz)

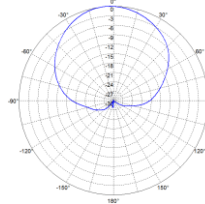


Horizontal Pattern

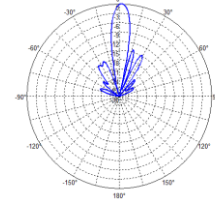


Vertical Pattern

Radiation Patterns (824 - 894 MHz)

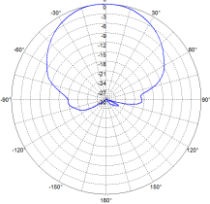


Horizontal Pattern

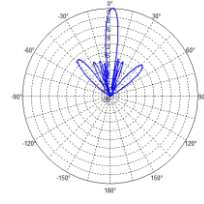


Vertical Pattern

Radiation Pattern (1695 - 1920 MHz)

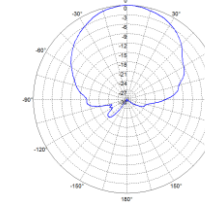


Horizontal Pattern

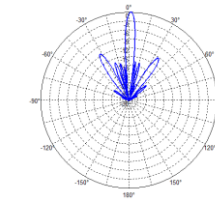


Vertical Pattern

Radiation Patterns (1920 - 2180 MHz)

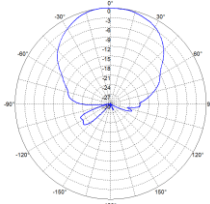


Horizontal Pattern

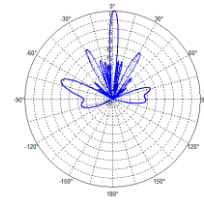


Vertical Pattern

Radiation Pattern (2300 - 2690 MHz)



Horizontal Pattern



Vertical Pattern