

## TRISECTOR PLANAR ARRAY ANTENNA 3300–3800MHz

- Diameter 350mm
- 3,5GHz TDD
- Internal RET
- 8T8R
- 1x Calibration port
- Beamforming

### RF Electrical specifications\*

Frequency Range (MHz)	3300–3800
Cluster Name	P1
Polarization (deg)	±45
Electrical Downtilt (deg)	2–12

\* All specifications are subject to change without notice. Refer to TELNET for the most current information.

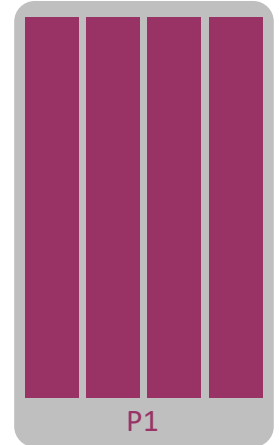
\* All specifications are based on NGMN recommendations on Base Station Antenna Standards (BASTA).

### Calibration and electrical parameters

Coupling factor (dB)	-26 +/- 2
Max Amplitude difference (dB)	0.9
Max Phase difference (deg)	5
VSWR	1.5
Co-polarization isolation (dB)	>20
Cross-polarization isolation (dB)	>25

### Radiation parameters

Radiation parameters		
Single column beam	Horizontal 3dB beamwidth (deg)	85
	Gain (dBi)	16.2
	Vertical 3dB Beamwidth (deg)	5.6
	Crosspolar discrimination 0° (dB)	18
	Crosspolar discrimination ±60° (dB)	10
	Front to Back Ratio total power ±30 (dB)	25
	First Upper Side lobe level	18
Broadcast beam	Horizontal 3dB beamwidth (deg)	65
	Gain (dBi)	16.5
	Vertical 3dB Beamwidth (deg)	5.7
	Crosspolar discrimination 0° (dB)	12
	Fron to Back Ratio total power ±30 (dB)	26
	First Upper Side lobe level	16
Service beam	0° Beam Horizontal 3dB beamwidth (deg)	21
	0° Gain (dBi)	21.2
	0° Beam Side lobe level	12
	60° Beam Horizontal 3dB beamwidth (deg)	25
	60° Gain (dBi)	20
	60° Beam Side lobe level	7
	Front to Back Ratio total power ±30 (dB)	30



## Mechanical specifications

Antenna Dimensions: Height/Diameter (mm)	1044 + 300 x 356
Packing Size: Height/Width/Depth (mm)	1460 x 472 x 478
Net Weight (kg)	15
Shipping Weight (kg)	20
Connector Quantity	27, 8+1 (calibration port) per sector
Connector Type	4.3-10 female connectors or others
Connector Position	Bottom
Wind Load Frontal (N @ 150 KMH)	376
Wind Load Lateral (N @ 150 KMH)	376
Wind Load Rear (N @ 150 KMH)	376
Survival wind speed (km/h)	200
Azimuth (Full antenna / Per Sector)	± 50° / ± 0°
Radome Material	Fiber glass + polyester
Radome Colour	RAL9018
Mechanical Distance between Mounting Points - Antenna	N/A
Mechanical Distance between Mounting Points - Pole	N/A
Lightning Protection	DC grounded



## TELNET RET

RET Type	Internal
Actuator standalone size: Height / Width / Depth (mm)	Inside the antenna
Actuator installed size: Height / Width / Depth (mm)	Inside the antenna
Working temperature range (°C)	-33 – 70
Power consumption (W)	1 – 10
Loss of position on power failure	False
Compatible standards	3GPP/AISG 2.0
Configuration management	Integrated RET, pre-configured.
Antenna configuration file availability	True
Antenna configuration file upgradability	Yes, by base station and proprietary portable controller
Software upgradability	Yes, by portable controller only.
Replaceability in field	Yes, without removing antenna.
Visual indicator available on tilt change	True
Daisy chain available	True




## TNA830A00Rx0y ordering codes:

<b>Rx:</b>	<ul style="list-style-type: none"> <li>• <b>RU:</b> Antenna with INTERNAL RET in all bands + one AISG control interface</li> <li>• <b>RI:</b> Antenna with INTERNAL RET in all bands + two AISG control interfaces</li> <li>• <b>RP:</b> Antenna ready for INTERNAL RET installation in all bands and one or two AISG control interfaces. Motors and electronics can be installed afterwards (without uninstalling antenna)</li> </ul>
<b>Oy:</b>	<ul style="list-style-type: none"> <li>• <b>01:</b> Antenna with 4.3-1 connectors</li> <li>• <b>03:</b> Antenna with NEX10 connectors</li> <li>• <b>04:</b> Antenna with 2.2-5 connectors</li> <li>• <b>06:</b> Antenna with cluster connectors</li> </ul>


\* By default, all antennas are supplied with trisector configuration and white colour (RAL9018). For different colours and sector configurations, contact TELNET Redes Inteligentes.

## RET Cabling recommendations:

### Cabling for daisy chain connexion between sectors

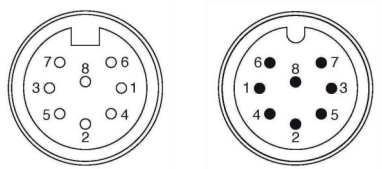
Telnet cable code	TNR215xxx (where xxx is the length of the cable)	
Connector 1	IEC 60130-9, female connector	
Connector 2	IEC 60130-9, male connector	
Length	500mm	

### Cabling between RETs and BTS/RRU

Telnet cable code	TNR215xxx (where xxx is the length of the cable)	
Connector 1	IEC 60130-9, female connector	
Connector 2	IEC 60130-9, male connector	
Length	From 1m to 150m	

### Pin assignment

<b>1</b>	Not connected
<b>2</b>	Not connected
<b>3</b>	RS485 B
<b>4</b>	Not connected
<b>5</b>	RS485 A
<b>6</b>	+10V - +30V DC
<b>7</b>	DC Return
<b>8</b>	Not connected

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