

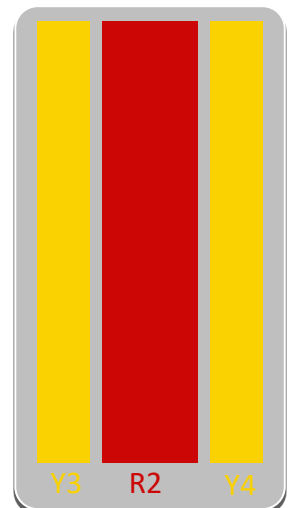
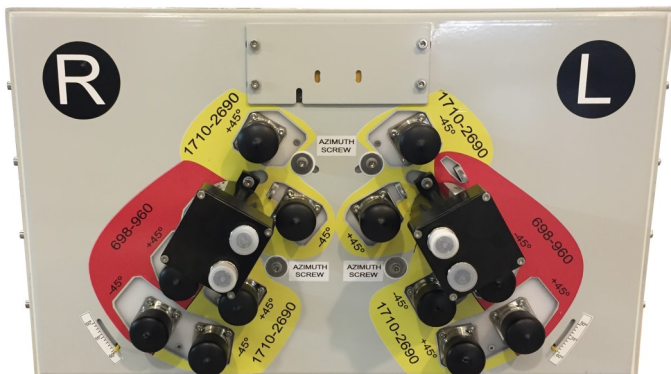
2x TRIBAND: 1x 698–960MHz, 2x 1710–2690MHz

- Dual panel antenna
- External RET available
- Variable azimuth 100° to 120° between panels

RF Electrical specifications*

Frequency Range (MHz)		698-790	792-862	880-960	1710-1880	1920-2170	2500-2690
Cluster Name		R1 // R2			Y1 // Y2 // Y3 // Y4		
Gain (dBi)	Min Tilt	10,7	11,2	10,9	15,0	15,3	16,0
	Mid Tilt	10,9	11,3	11,0	14,9	15,2	15,8
	Max tilt	10,5	10,5	10,0	14,8	15,0	15,3
	Over all Tilts:						
	Average	10,8	11,1	10,7	14,8	15,2	15,7
	Tolerance	0,8	0,8	0,8	0,2	0,4	0,6
Azimuth Beamwidth (deg)	Average	72,0	71,0	69,0	62,0	66,0	60,0
	Tolerance	5,0	3,0	4,0	5,0	3,0	4,0
Elevation Beamwidth (deg)	Average	30,0	27,0	24,4	15,4	13,7	11,0
	Tolerance	2,5	2,0	2,0	0,6	0,8	0,7
Elevation Downtilt Deviation (deg)		<1	<1	<1	<0,7	<0,4	<0,6
Electrical Downtilt (deg)		9–25			4-16		
First Upper Sidelobe level		>12	>12	>13	>15	>17	>15
Upper Sidelobe Level peak to 20° above (dB)		>12	>12	>13	>20	>20	>15
Cross Polar Discrimination at Boresight (dB)		>18	>19	>17	>20	>20	>21
Cross Polar Discrimination Over Sector (dB)		>10	>8	>7	>10	>8	>8
Front to Back Ratio total power ±30° (dB)		>20	>21	>21	>25	>27	>26
Cross Polar Isolation (dB)		>25	>25	>25	>25	>25	>25
Interband isolation (dB)				>25			
Polarization (deg)				±45			
Impedance (Ω)				50			
VSWR				< 1.5:1			
PIM, 2x43dBm (dBc)				< -150			
Max. Effective Power per Port (W)				300			

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



Mechanical specifications

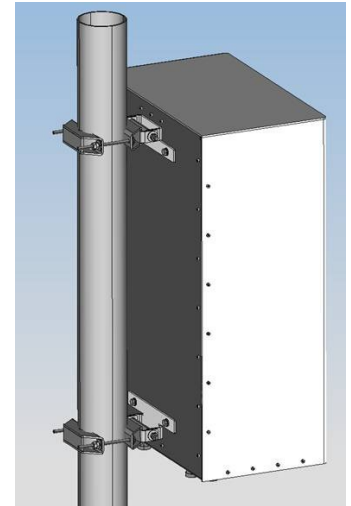
Antenna Dimensions: Height/Width/Depth (mm)	800 x 500 x 300
Packing Size: Height/Width/Depth (mm)	981 x 631 x 427
Net Weight (kg)	25
Shipping Weight (kg)	30
Connector Quantity	12
Connector Type	7/16 or 4.3-10 female connectors
Connector Position	Bottom
Survival wind speed (km/h)	200
Azimuth (Full antenna / Per Sector)	100° to 120° between panels
Radome Material	ABS/PMMA
Radome Colour	RAL9018
Mechanical Distance between Mounting Points - Antenna	569
Mechanical Distance between Mounting Points - Pole	504
Lightning Protection	DC grounded

TELNET RET

RET Type	External
Actuator standalone size: Height / Width / Depth (mm)	110 x 60 x 60
Actuator installed size: Height / Width / Depth (mm)	110 x 60 x 60
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	External 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


Ordering codes

CODE	RET	4.3-10 or 7/16 connectors
TNA352A33R:	RET included	7/16
TNA352A33:	Without RET	7/16
TNA352A33R001:	RET included	4.3-10
TNA352A330001:	Without RET	4.3-10




RET Cabling recommendations:


Internal cabling for daisy chain connexion between RETS

Telnet cable code	TNR211050	
Connector 1	IEC 60130-9, female right angle connector	
Connector 2	IEC 60130-9, male right angle connector	
Length	500 mm	

Cabling between RETs and BTS/RRU: Option 1

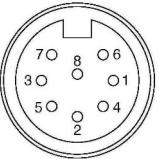
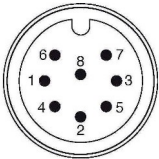
Telnet cable code	TNR212xxx (where xxx is the length of the cable)	
Connector 1	IEC 60130-9, female right angle connector	
Connector 2	IEC 60130-9, male connector	
Length	From 1m to 150m	

Cabling between RETs and BTS/RRU: Option 2

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

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

Contact Information

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