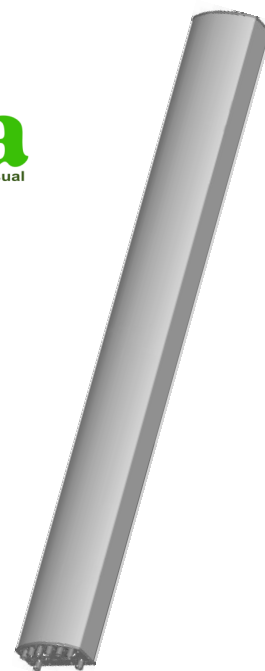


Quad-band (BB-BB-BB-BB) Panel Antenna for mobile BTS



Features

Frequency bands

- 1710-2170 MHz
- 1710-2170 MHz.
- 1710-2170 MHz
- 1710-2170 MHz.

Variable Electrical Tilt

Wide Electrical Tilt range (4°-14°).

RET

Ready for RET (remote electrical Tilt) configuration.

Accessibility

Easy access to connector, antenna tilt adjusting or RET device at the bottom part.

Minimum size

Minimum weight and size in the market, thanks to fractal technology. It reduces stress due to wind and structural requirements.

Polarization

Cross-polar: +45° and -45° connectors 7/16 type

Anchoring

Clamps and mechanical downtilt for standard mast are available.

Description

TELNET **Quad-band (BB/BB/BB/BB) Panel Antenna** is part of **ENVIA**, a new generation of antennas for mobile phone base stations, whose radiating elements are based on fractal geometry. This technology significantly reduces the size and volume of the antenna, enabling integration into a single panel the equivalent of 4 traditional singleband panels.

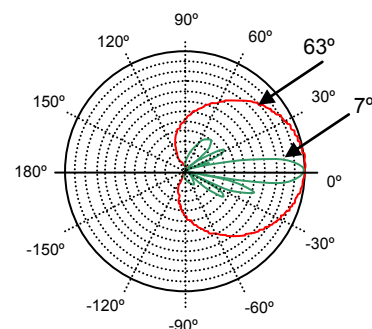
The innovative line of panel antennas of TELNET significantly reduces the visual impact as it is possible to mimic the antenna, facilitating their integration into the environment through the simulation of building elements, maintaining the versatility of azimuthal and zenithal adjustments (tilt). In addition, the low size of this family of antennas simplifies the installation and maintenance work. This family of antennas is ready for the addition of a Compact RET (Remote Electrical Tilt).

TELNET panel antenna can be mounted on a traditional mast by anchors and mechanical tilt.

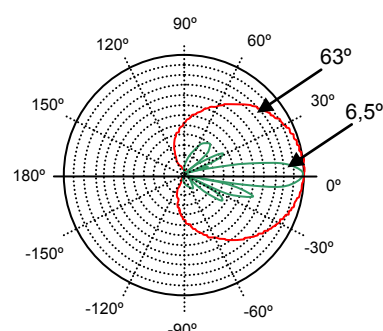
Quad-band (BB/BB/BB/BB) Panel Antenna for mobile BTS

Family TNA080 - Technical Features

Radio-Electrical	x2 Broadband Down	x2 Broadband Up
Frequency Range	1710 - 2170 MHz	1710 - 2170 MHz
	DCS // UMTS	DCS // UMTS
Polarization	Xpol, +/- 45°	Xpol, +/- 45°
Gain Max	17,3 dBi	17 dBi
Gain +/- Avg. Dev	16,64 ± 0,2 dBi // 16,64 ± 0,3 dBi	16,64 ± 0,2 dBi // 16,64 ± 0,3 dBi
Horizontal Beam width	63° // 61°	63° // 61°
Vertical Beam width	7° // 6,5°	7° // 6,5°
Cross Polar Discrimination		
Boresight	>25dB	>25dB
Sector ±60°	>10dB	>10dB
F/B Ratio Copolar (180°+/-30° cone)	27 dB	27 dB
Side lobe suppression for first side lobe above horizon	15 17 15 dB	15 17 15 dB
	4° 10° 14°	4° 10° 14°
Electrical tilt continuously adjustable	4° - 14° (band independent)	4° - 14° (band independent)
VSWR	< 1.5:1	< 1.5:1
Interport Isolation	> 30 dB	> 30 dB
Nullfill	25 dB	25 dB
Impedance	50 Ohms	50 Ohms
Max. Power per input	300W	300W
Inter modulation Products (2*20W)	150dBc	150dBc
Prepared for RET	OK	OK



DCS pattern per sector



UMTS pattern per sector

Mechanical	
Input	8 x 7/16 female
Connectors position	Bottom, 8 (7/16)
Dimensions (HxWxD)	2700mm x 273mm x 164mm
Weight	25 Kg.
Max. speed wind	200 Km/h

Material	
Radome	Fiber glass + polyester
End Caps	Plastic of high resistance for the exterior
Screws and Nuts	Stainless Steel

Environmental and mechanical tests	
IEC 60068-2-2: Dry Heat	UNE-EN 60598-2-3: Resistance to wind
IEC 60068-2-56: Damp Heat Steady State	IEC 60068-2-6: Sine Vibration
IEC 60068-2-30: Damp Heat Cyclic	Particular Specification: Resistance to ice
IEC 60529: IP Code Test	IEC 60068-2-27: Shock Test
IEC 60068-2-64: Random Vibration	IEC 60068-2-32: Free Fall Test
IEC 60068-2-14: Change of Temperature	IEC 60695-2-1/2: Resistance to fire
IEC 60068-2-1: Cold	IEC 60068-2-29: Bump Test
IEC 60068-2-18: Water (Handheld shower)	

Telnet antennas have passed environmental tests recommended in ETS 300 019-2-4, and extensive test recommended by the main operators over the world.

Contact Information

Headquarters

Polígono Industrial Centrovía
c/ Buenos Aires, 18
50196 La Muela, Zaragoza
Spain

Tel.: (+34) 976 14 18 00
Fax: (+34) 976 14 18 10
comercial@telnet-ri.es

Commercial office in Madrid

Avda. Menéndez Pelayo, 85 - 1º A
28007 Madrid
Spain

Tel.: (+34) 91 434 39 92
Fax: (+34) 91 434 40 84

Commercial office in Lisbon

Avenida da Liberdade, 110
1269- 046 Lisbon
Portugal