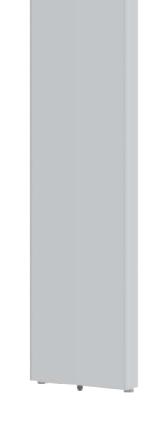


### Twin Band | Panel Antenna | 2x X-Pol | 33° / 33° | 20.0 / 20.0 dBi | Variable Tilt

- Twin band, 2x X-Pol (Quad-Pol), variable tilt, panel antenna
- Independent variable electrical tilt range  $0^{\circ}$ - $10^{\circ}$  /  $0^{\circ}$ - $10^{\circ}$
- Patented internal RET actuator adds no additional length to the antenna
- Available in Manual and Remote AISG v1.1 or 3GPP/AISG v2.0 versions

Ordering Options			Model Number					
When ordering, repla	ce "x"	in the model nur	mber with one of the option	ns listed below	I.			
Manual Electrical Tilt			WBX033T20M000					
Remote Electrical Tilt AISG v1.1			WBX033T20R000					
Remote Electrical Tilt AISG v2.0 / 3GPP			WBX033T20R000G					
Mounting bracket kits	and o	ther accessories	are ordered separately.					
Electrical Characteristics			2 x 1710-2170 MHz					
Frequency Bands			1710-1880 MHz	1850-19	90 MHz	1900-2	170 MHz	
Polarization			2 x ±45° (Quad-Pol)					
Horizontal Beamwidth			37°	33	3°	3	0°	
Vertical Beamwidth			8°	7.	5°	7.	.0°	
Gain		19.0 dBi	19.5	i dBi	20.0	) dBi		
Electrical Downtilt			0-10°					
Impedance			50Ω					
VSWR			< 1.4:1					
Upper Sidelobe Suppression			≥ 18 dB					
Front-to-Back Ratio (±15° from 180°)			> 30 dB					
Inter-port Isolation		at 0°	> 25 dB					
		all other tilts	> 28 dB					
IM3 (2x20W carrier)			< -153 dBc					
Input Power			250 W					
Total Number of Conn	ectors		Antennas I		ors located at the	bottom		
Connectors Per Band, Type, Location	1710-2170 MHz		2 Connectors / 7/16-DIN Female / Bottom					
	1710-2170 MHz		2 Connectors / 7/16-DIN Female / Bottom					
Diplexed	'/ '0'	2.70111112	No					
Lightning Protection			Direct Ground					
Operating Temperature			-40° to +60° C (-40° to +140° F)					
Mechanical Character		D 113	1252 550 100		52.2	22.0.2.2		
Dimensions (Length x Width x Depth)  Weight without Mounting Brackets  MET  RET		1353 x 558 x 100	mm	53.3 x	22.0 x 3.9	in 		
			19.0	kg		41.9	lbs	
		RET	19.3	kg		42.5	lbs	
Survival Wind Speed		201	km/hr		125	mph		
Wind Loads		Front	922	N		207	lbf	
(160 km/hr or 100 mp	h)	Side	165	Ν		37	lbf	



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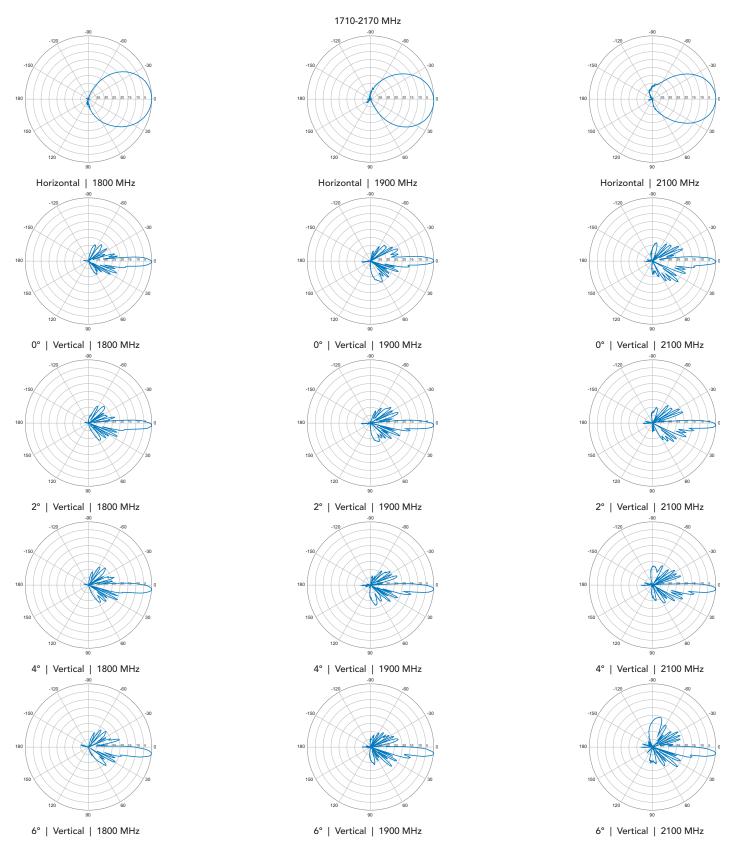
## Twin Band | Panel Antenna | 2x X-Pol | 33° / 33° | 20.0 / 20.0 dBi | Variable Tilt

Electrical Downtilt Control									
Electrical downtilt for each band can be controlled separately. Tilt indicator(s) are covered by removable transparent cap(s).									
Manual Electrical Tilt (MET) Control	A colored knob at the end of the tilt indicator allows change of the tilt without need of a tool. The knob color is identical to the corresponding connector ring color. To access the knob, remove the cap by turning it counterclockwise. It is re-installed by opposite rotation. Do not remove the transparent cap(s) from the antenna.								
Remote Electrical Tilt (RET) Control	The remote control of the electrical tilt is managed by a module (MDCU) totally inserted at the bottom of the antenna. One single module controls individually the tilt of each band (no need of daisy chain cables between the bands). This module does not add any additional length at the bottom of the antenna. For RET control, the transparent cap must be in place and locked. The tilt angle indicator always remains visible and the antenna still has manual tilt control (manual override).								
RET Module	The RET module is factory installed and does not need to be ordered separately.								
	Part Number for AISG v1.1 protocol: MDCU-A0000 One unit installed in WBX033T20R0								
	Part Number for 3GPP/AISG	v2.0 protocol: MDCU-G00	00 One unit insta	One unit installed in WBX033T20R000G					
Important Installation Instructions	In order to operate RET control, the transparent caps covering the tilt adjustment indicators must be engaged and locked. Do not cut them from the antenna.								
	Do not install the antenna with the connectors facing upward.								
Mounting Options	Part Number	lmage	Fits Pipe Diameter	Weight					
All mounting bracket kits are ordered separately unless otherwise indicated. Select from the options listed below.									
2-Point Mounting Bracket Kit	MKS04P01		40-115 mm 1.6-4.5 in	2.6 kg 5.8 lbs					
2-Point Mounting & Downtilt Bracket Kit	MKS04T02		40-115 mm 1.6-4.5 in	3.9 kg 8.5 lbs					

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## Twin Band | Panel Antenna | $2x X-Pol | 33^{\circ} / 33^{\circ} | 20.0 / 20.0 dBi | Variable Tilt$



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### Twin Band | Panel Antenna | 2x X-Pol | 33° / 33° | 20.0 / 20.0 dBi | Variable Tilt

