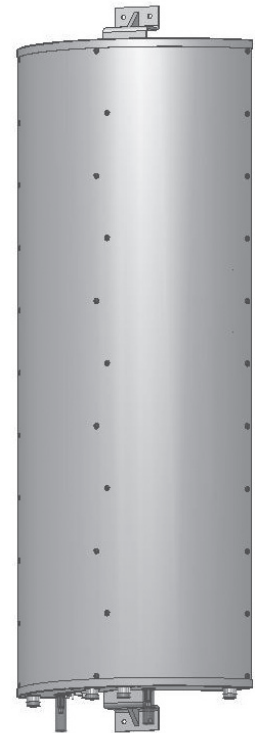


WBX033S20x000

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



- Twin beam, twin band, 2x X-Pol, variable tilt, panel antenna
- Variable electrical tilt range of 2°-10° / 2°-10°
- Patented internal RET actuator adds no additional length to the antenna
- Available in Manual and Remote AISG1.1 or 3GPP/AISG2.0 versions
- Consists of two X-pol antennas physically angled $\pm 30^\circ$ from antenna center

Ordering Options		Model Number		
When ordering, replace “x” in the model number with one of the options listed below.				
Manual Electrical Tilt		WBX033S20M000		
Remote Electrical Tilt AISG v1.1		WBX033S20R000		
Remote Electrical Tilt AISG v2.0 / 3GPP		WBX033S20R000G		
Electrical Characteristics		2 x 1710-2170 MHz		
Frequency Bands		1710-1880 MHz	1850-1990 MHz	1900-2170 MHz
Polarization		2 x ±45°		
Horizontal Beamwidth (-3 dB)		33°	33°	33°
Horizontal Beamwidth (-10 dB)		60°	60°	60°
Vertical Beamwidth		7°	7°	7°
Beamwidths		Antenna consists of two (2) antennas physically angled ±30° from antenna center		
Gain		19.0 dBi	19.5 dBi	20.0 dBi
Electrical Downtilt		2-10°		
Impedance		50Ω		
VSWR		< 1.5:1		
Upper Sidelobe Suppression (0° to 20° above main beam)		18 dB		
Azimuth Sidelobe Suppression (±90° from boresite)		30 dB		
Front-to-Back Ratio		> 30 dB		
Isolation Between Ports		> 30 dB		
Beam-to-Beam Isolation		30 dB		
IM3 (2x20W carrier)		< -153 dBc		
Input Power		300 W		
Total Number of Connectors		Antennas has 4 connectors 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		No		
Lightning Protection		DC Chassis		
Operating Temperature		-40° to +60° C (-40° to +140° F)		
Mechanical Characteristics				
Dimensions (Length x Width x Depth)		1321 x 521 x 178 mm	52.0 x 21.0 x 7.0 in	
Weight without Mounting Brackets		20 kg	44.1 lbs	
Survival Wind Speed		201 km/hr	125 mph	



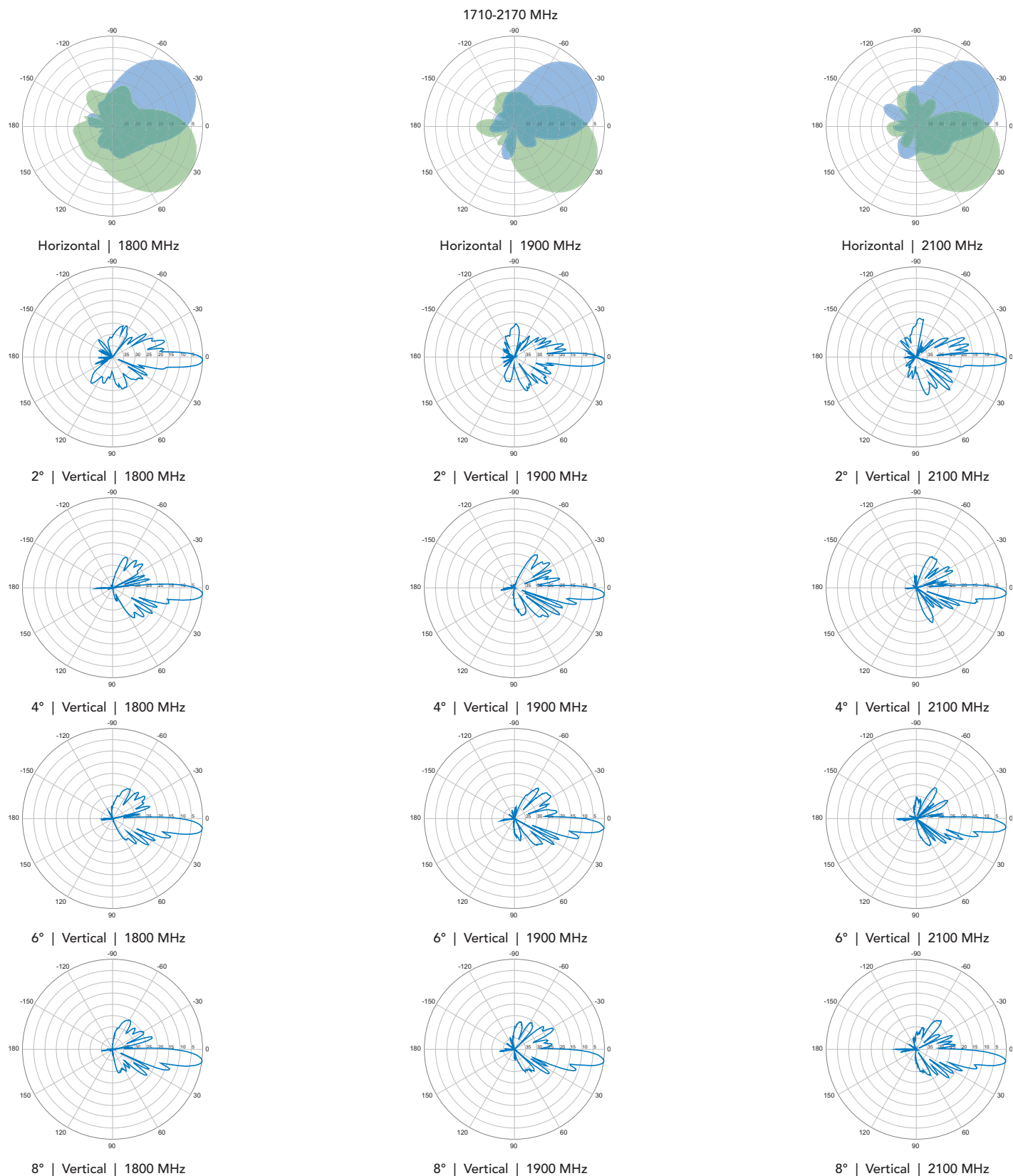
WBX033S20x000

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

Electrical Downtilt Control				
Electrical downtilt for each antenna array can be controlled separately. The two 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 counter-clockwise. 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 WBX033S20R000	
	Part Number for 3GPP/AISG v2.0 protocol:	MDCU-G0000	One unit installed in WBX033S20R000G	
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	Image	Fits Pipe Diameter	Weight
The below mounting kit is included with the antenna and does not need to be ordered separately. Due to size, this antenna cannot be mechanically downtilted.				
Mounting Bracket Kit	MKS03P01		40-115 mm 1.6-4.5 in	4 kg 9 lbs

WBX033S20x000

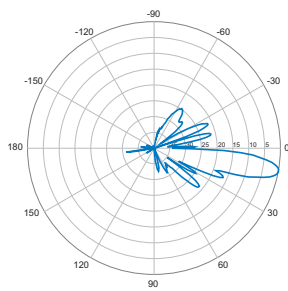
Twin Beam | Twin Band | Panel Antenna | 2x X-Pol | 33° / 33° | 20.0 / 20.0 dBi | Variable Tilt



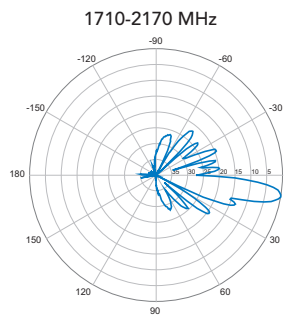
Quoted performance parameters are provided to offer typical or range values only and may vary as a result of normal manufacturing and operational conditions. Extreme operational conditions and/or stress on structural supports is beyond our control. Such conditions may result in damage to this product. Improvements to product may be made without notice.

WBX033S20x000

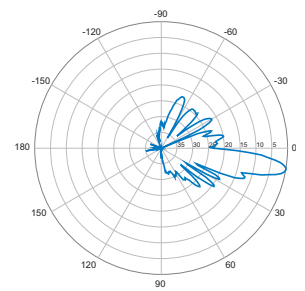
Twin Beam | Twin Band | Panel Antenna | 2x X-Pol | 33° / 33° | 20.0 / 20.0 dBi | Variable Tilt



10° | Vertical | 1800 MHz



10° | Vertical | 1900 MHz



10° | Vertical | 2100 MHz