

TDD : X Pol 1880~1920/2010~2025/2575~2635MHz 100/90/65°±15° 12/13/14.5dBi 6°Fixed

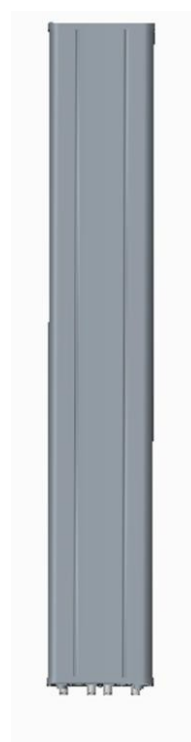
FDD : X Pol 870~960/1710~1880MHz 65°14/15.5dBi Manual or by optional RCU antenna

Electrical specifications						
General parameters	Frequency range(MHz)		1880-1920(F)	2010-2025(A)	2575-2635(D)	
	Polarization		±45°			
	Electrical downtilt(°)		6	6	6	
	Electrical downtilt tolerance(°)		±1	±1	±1	
Calibration and electrical parameters	Coupling factor between calibration port and each antenna port(dB)		-26±2	-26±2	-26±2	
	Max.amplitude tolerance from calibration port to input ports(dB)		<0.7	<0.7	<0.7	
	Max.phase tolerance from calibration port to input ports(°)		≤5	≤5	≤5	
	Ports VSWR		≤1.5	≤1.5	≤1.5	
	Co-polarization isolation between ports(dB)		≥25	≥25	≥25	
	Cross-polarization isolation between ports(dB)		≥28	≥28	≥28	
Radiation parameters	Single column beam	Horizontal 3dB beam width(°)		100±15	90±15	65±15
		Gain(dBi)		≥12	≥13	≥14.5
		±60°Gain roll-off at sector edge(dB)		/	/	-12±2
		Vertical 3dB beam width(°)		/	/	≥9
		Cross polar ratio(0°)(dB)		≥18	≥18	≥18
		Cross polar ratio(±60°)(dB)		≥10	≥10	≥10
		Front to back ratio(dB)		≥23	≥23	≥25
		Vertical sidelobe suppression for first sidelobe above main beam(dB)		/	/	≤-16
	65° Broadcast beam	Horizontal 3dB beam width(°)		65±5	65±5	65±5
		Gain(dBi)		≥12	≥13	≥14
		±60°Gain roll-off at sector edge(dB)		-12±2	-12±2	-12±2
		Vertical 3dB beam width(°)		≥12	≥11	≥9
		Cross polar ratio(0°)(dB)		≥22	≥22	≥22
		Cross polar ratio(±60°)(dB)		≥10	≥10	≥10
		Front to back ratio(dB)		≥28	≥28	≥28
		Vertical sidelobe suppression for first sidelobe above main beam(dB)		≤-16	≤-16	≤-16
	Service beam	0° direct beam gain(dBi)		≥18	≥18.5	≥19
		0° direct beam horizontal 3dB beam width(°)		≤29	≤26	≤25
		0° direct beam sidelobe suppression(dB)		≤-12	≤-12	≤-12
		±60° direct beam gain(dBi)		≥15.5	≥16.5	≥16.5
		±60° direct beam horizontal 3dB beam width(°)		≤32	≤32	≤23
		±60° direct beam horizontal sidelobe suppression(dB)		≤-5	≤-5	≤0
		0° direct beam cross polar ratio(axial)(dB)		≥22	≥22	≥22
		0° direct beam front to back ratio(dB)		≥28	≥28	≥28

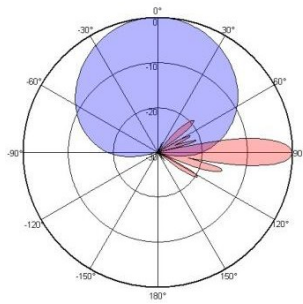
Electrical specifications - FDD		
Frequency Range(MHz)	870~960	1710~1880
Polarization	±45°	±45°
Gain (dBi)	14	15.5
Electrical downtilt (°)	0~15	0~8
Horizontal-3dB beamwidth (°)	65	65
Vertical-3dB beamwidth (°)	16	10
Sidelobe suppression (dB) (First sidelobe above main beam)	0°...5°...10°..15° 16...15...15..14	0°...4°...8° 16...15...14
Front-to-back ratio (dB)	≥25	
Isolation: intra-system (dB)	≥30	
Cross-polar ratio (dB)	≥15 (±60°≥10)	
Impedance (Ω)	50	
VSWR	≤1.5	
Intermodulation IM3 (2x43dBm carrier)	≤-138dBc	
Max. power per input (W)	250	250
Lightning protection	DC Ground	

Electrical specifications - Combined	
1 TDD and FDD Same polarization isolation between different antennas (SA1/SB5)	≥40
2 TDD and FDD Different polarization isolation between different antennas(SA5/SB1)	≥40

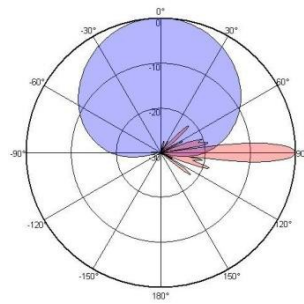
Mechanical specifications	
Connector position	Bottom
Connector type	TDD:2x Assemble Connector-Male FDD:4x7/16 DIN-Female
Antenna dimensions HxWxD(mm)	1740x320x140
Packing size HxWxD (mm)	1875x430x240
Antenna weight (kg)	22.9
Installation kit weight (kg)	4.5
Packing weight (kg)	32
Radome material	Fiberglass
Radome color	Gray
Wind load (N,at 150km/h) Frontal/Lateral/Rearside	539/177/640
Max. wind velocity(km/h)	216
Humidity	≤ 100%
Operating temperature (°C)	-40~65
Mechanical adjustment tilt range (°)	0~10
Mounting hardware (mm)	Φ50~Φ115



**Pattern specifications - FDD**



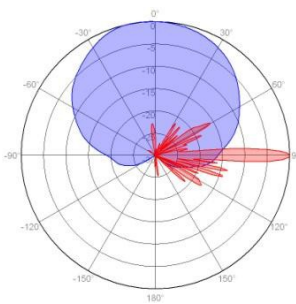
870~960MHz



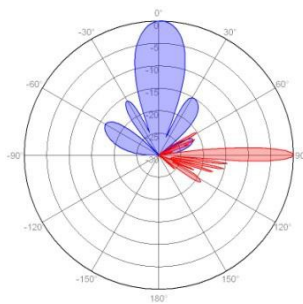
1710~1880MHz

**Pattern specifications - TDD**

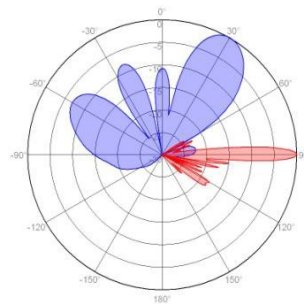
**2018MHz**



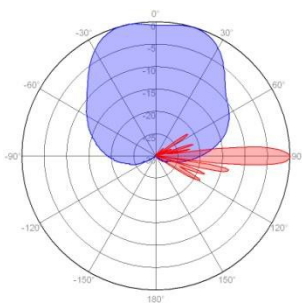
Single Column Beam



0 ° Service Beam

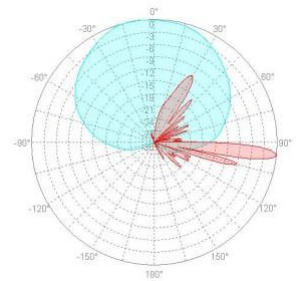


60 ° Service Beam

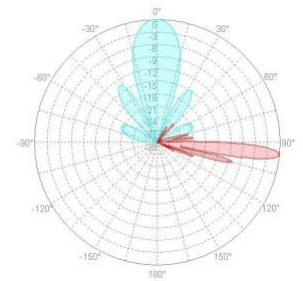


BCH Beam

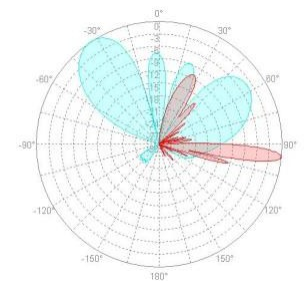
**2600MHz**



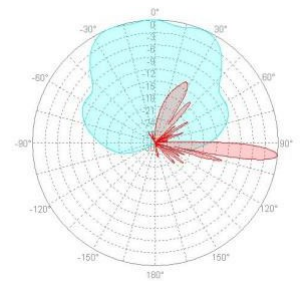
Single Column Beam



0 ° Service Beam



60 ° Service Beam



BCH Beam