



# KBT 8-Ports TDD Smart Antenna

## KS90D2327A8-18F-I-W

### General Electrical Properties

General parameters	Frequency Range (MHz)	2300-2400	2490-2690
	Polarization	±45°	
	Electrical Downtilt (°)	2-12, continuously adjustable	
	Max. power per port (W)	60 (at 50°C ambient temperature)	
	Impedance (Ω)	50	
	Grounding	DC Grounding	
Calibration and electrical parameters	Coupling factor between calibration port and each antenna port (dB)	-26±2	
	Max. amplitude tolerance from calibration port to input ports (dB)	0.9	
	Max. phase tolerance from calibration port to input ports (°)	7	
	VSWR	≤1.5	
	Co-polarization isolation between ports (dB)	2°~6°≥20; 7°~12°≥28	
	Cross-polarization isolation between ports (dB)	2°~6°≥25; 7°~12°≥28	

### TDD LTE Electrical Specifications

Radiation parameters	Frequency Range (MHz)		2300-2400	2490-2690
	Single column beam	Gain (dBi)	17±0.8	17.8±0.9
		Horizontal 3dB Beam Width (°)	84±10	73±5
		Front to Back Ratio (dB)	>25	>25
		Cross-Polar Ratio, 0° (dB)	>18	>18
		Vertical 3dB Beam Width (°)	6.2±0.5	5.7±0.5
		Side lobe suppression for first side lobe above main beam (dB)	>16	>16
	65° Broadcast beam	Gain (dBi)	17.0±0.6	17.8±0.9
		Horizontal 3dB Beam Width (°)	56±13	54±14
		Front to Back Ratio (dB)	>25	>25
		Vertical 3dB Beam Width (°)	6.2±0.5	5.7±0.6
		Cross-Polar Ratio, 0° (dB)	>18	>18
		Side lobe suppression for first side lobe above main beam (dB)	>16	>16
	Service beam	0° direction Beam Gain (dBi)	21±0.5	21.5±0.8
		0° direction Beam Horizontal 3dB Beam Width (°)	22	20
		0° direction Beam horizontal side lobe suppression (dB)	>15	>15
		0° direction Beam Front to Back Ratio, ±30° (dB)	>30	>30
		0° direction Beam Cross-Polar	>20	>20

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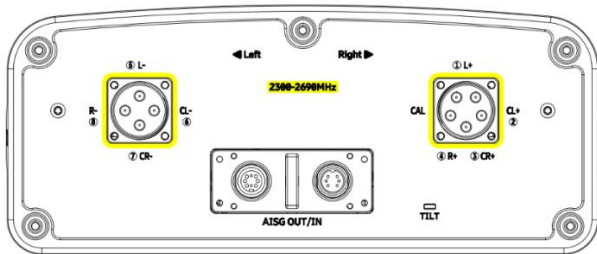
# KBT 8-Ports TDD Smart Antenna

	Ratio, 0° (dB)	
Values based on NGMN recommendations on Base Station Antenna Standards V12.0 (BASTA V12.0)		

Mechanical Specifications	
RET type	Integrated RET (AISG2.0/3GPP)
AISG Connectors (1 in 1 out)	2 x 5 pin (in: Male; out: Female)
Connector	1 x MQ4 Male + 1 x MQ5 Male (Bottom)
Antenna dimensions (H x W x D) (mm)	1380 x 318 x 129
Packing dimensions (H x W x D) (mm)	1465 x 410 x 295
Antenna weight (kg)	16.5
Clamps weight (kg)	5.5
Diameter of installation pole (mm)	φ55-φ115
Radome material	Fiberglass
Radome color	Light grey
Operational temperature (°C)	-40 to +65
Wind load at 42m/s (N)	609/ 173/ 666 (Frontal/ Lateral/ Rearal)
Max. operational wind speed (km/h)	200

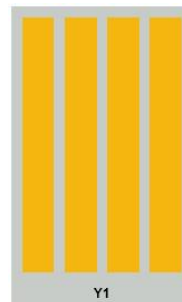
## Layout and Pattern

### Connector Position:



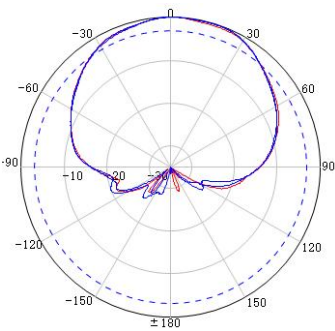
Y1: 2300-2690 MHz;

### Configuration Types:

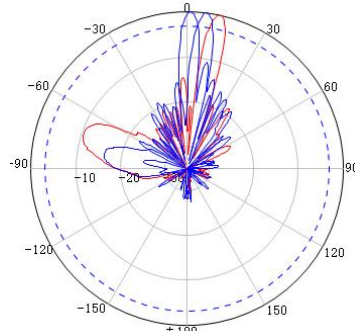


RET S/N:  
KBxxx-Y1-xx.....;

### Pattern sample for reference:



2300-2690 MHz (Horizontal)



2300-2690 MHz (Vertical)

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