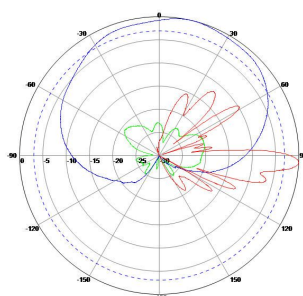


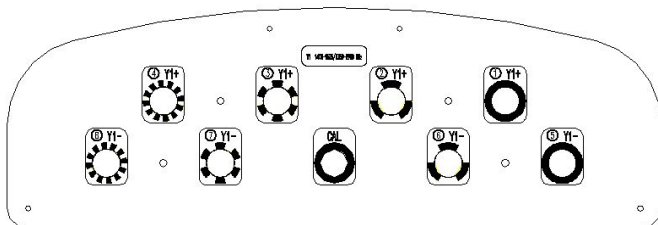


Dual Polarized Smart Antenna Technical Sheet
1400~1900MHz 105° 65° 15dBi 6° Tilt

Electrical specifications		KDA4-1419D15BT6	
Frequency range (MHz)		1400~1525	1750~1900
Polarization		$\pm 45^\circ$	
Electrical Downtilt ($^\circ$)		6	
Down-tilt Precision($^\circ$)		± 1	
V.S.W.R.		≤ 1.5	
Isolation between Co-polarization Ports(dB)		≥ 28	
Isolation between Cross-polarization Ports(dB)		≥ 28	
Transmission from Any Column's Port to Calibration Port(dB)		-26 ± 2	
Max.Altitude Difference between Calibration Port and Each Radiation Port (dB)		≤ 0.7	
Max.Phase Difference between Calibration Port and Each Radiation Port ($^\circ$)		≤ 5	
Single Column	Horizontal -3dB Beamwidth ($^\circ$)	105 ± 15	65 ± 15
	Gain(dBi)	≥ 14	
	Cross Polar Radio (dB)	$\geq 18, (\pm 60^\circ \geq 10)$	
	Front-to-back Ratio(dB)	≥ 23	≥ 25
Broadcasting Pattern	Horizontal Beamwidth($^\circ$)	65 ± 5	
	Vertical Beamwidth($^\circ$)	≥ 7	≥ 6
	Gain(dBi)	≥ 15	
	Edge level at $\pm 60^\circ$ (dB)	12 ± 2	
	Cross Polar Radio (dB)	$\geq 22, (\pm 60^\circ \geq 10)$	
	Front-to-back Ratio(dB)	≥ 28	
	First Upper Side Lobe Suppression (dB)	≤ -15	
	First zero level(dB)	≥ -18	
Traffic Beam Pattern	Gain for Operation Pattern at 0° Direction (dBi)	≥ 19	≥ 20
	Horizontal Beamwidth for Operation Pattern at 0° Direction ($^\circ$)	≤ 29	≤ 23
	Horizontal Minor Electric Level for Operation Pattern at 0° Direction (dB)	≤ -12	
	$\pm 60^\circ$ Direction Gain(dBi)	≥ 18	
	Horizontal Beamwidth for Operation Pattern at $\pm 60^\circ$ Direction ($^\circ$)	≤ 34	≤ 28
	Horizontal Minor Electric Level for Operation Pattern at $\pm 60^\circ$ Direction (dB)	≤ -5	≤ -4
	Cross Polar Radio for Operation Pattern at 0° Direction (Main-direction)	≥ 22	
	Front-to-back Ratio for Operation Pattern at 0° Direction (dB)	≥ 28	
Pattern(Single Column)		H Plane(Blue)	E Plane(Red)





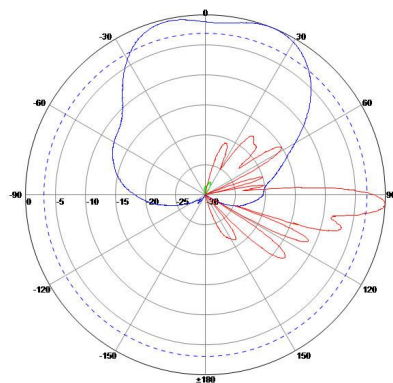
Mechanical specifications						
Connector	(8+1) ×N Female					
Connector position	Bottom					
Height/width/depth(mm)	(1610×402×135) ±10					
Weight (kg) (without bracket)	17±1					
Radome material	UPVC					
Radome color	Gray					
Mechanical tilt (°)	0~15					
Operating temperature (°C)	-40~60					
Rated wind velocity (m/s)	60					
Suitable pole diameter (mm)	70~115					
Ports Sketch						
						
Antenna Weight						
	Frequency (MHz)	Port	1/5	2/6	3/7	4/8
0° Traffic Beam Pattern	1400~1525 1750~1900	Altitude	1	1	1	1
		Phase (°)	0	0	0	0
60° Traffic Beam Pattern	1400~1525	Altitude	1	1	1	1
		Phase (°)	0	-110	-220	-330
	1750~1900	Altitude	1	1	1	1
		Phase (°)	0	-137	-274	-51
65° Broadcasting Pattern	1400~1525	Altitude	0.3	1	1	0.3
		Phase (°)	-18	-6	0	-168
	1750~1900	Altitude	0.1	1	1	0.4
		Phase (°)	20	0	-12	-180
Pattern (0° Traffic Beam Pattern)						



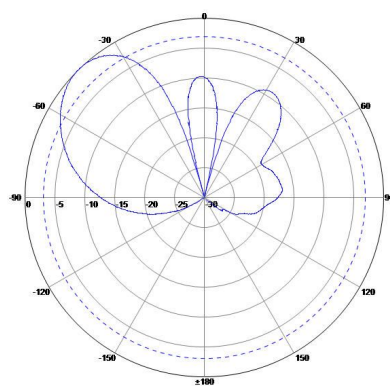
Kenbotong Technology Co., Ltd.

Multi-band Panel (MHz)	1400~1525	1750~1900
Dual Polarization	X	
Half-power Beam Width	6°	

Pattern (65°Broadcasting Pattern)



Pattern (60° Traffic Beam Pattern)



Installation Sketch

