

Band	1695 - 2180 x2 / 3400 - 3800 x2 / 5150 - 5925
Polarization	XX / XX / X
Half-power Beam Width	160°

DKK Co., Ltd.

Model: DK16BDYKDP-10R86F [Cardioid Antenna]

Rev. 10

Features

- 4G/5G cardioid antenna for outdoor DAS and small cells applications
- 4x ports for AWS/PCS band 1695-2180 MHz with internal RET
- 4x ports for CBRS band 3400-3800 MHz
- 2x ports for U-NII band 5150-5925 MHz*
- Ideal for multi-carrier or 4x4 MIMO deployments
- Two mounting options using pole top and side mount brackets
- Available with 4.3-10(F) connectors
- * This antenna meets the FCC testing requirements for UNII-1 band for gain and upper side-lobe performance.
- Compliance to 789033 D02 General U-NII Test Procedures New Rules v01404.

Electrical Specifications

Operating Frequency Band ,[MHz]		1695 - 2180 x2 / 3400 - 3800 x2 / 5150 - 5925			
Frequency Range ,[MHz]		1695 - 1880	1880 - 2180	3400 - 3800	5150 - 5925
Polarization , [degrees]		±45° x2	±45° x2	±45° x2	±45°
Gain [dBi]		9.5	9.5	5	6
Horizontal Beam Width ,[degrees]		160	160	160	160
Vertical Beam Width ,[degrees]		19	18	90	25
Adjustable Electrical Downtilt[degrees]		0 - 20	0 - 20	0 (Fixed)	0 (Fixed)
VSWR		≤ 1.5	≤ 1.5	≤ 1.5	≤ 1.5
Isolation	Cross Polar, [dB]	≥ 20	≥ 20	≥ 20	≥ 20
	Inter Band, [dB]	≥ 20	≥ 20	≥ 20	≥ 20
3rd Order PIM@2x43dBm ,[dBc]		≤ -150	≤ -150	N/A	N/A
Maximum Input Power (per port)		100W	100W	30W	10W
Impedance		50Ω			
Lightning Protection		DC Ground			



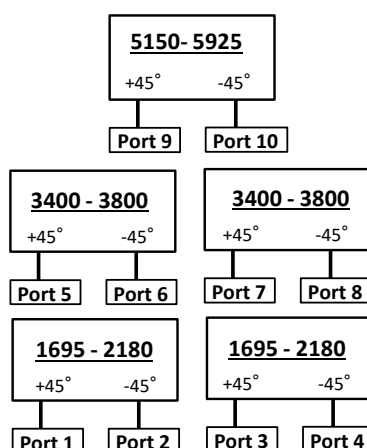
Mechanical Specifications

Radome Material	Fiberglass
Connector Type	4.3-10 DIN Female x10
Operating Temperature Range	-40 ~+65°C (-40 ~+149°F)
Operating Humidity	0 - 95%RH
Enclosure Protection	IP55
RF Connector Protection	IP67
Wind Load	184N @150 km/h (@93.3 mile/h)
Wind Velocity	241.4 km/h (150 mile/h)
Weight	7.9 kg (17.5 lb)
Dimension (Length x width x depth)	600 x φ240 mm (23.63 x φ9.45 inch)

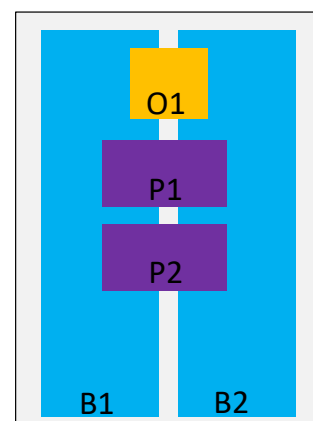
RET Informations

Condition	Internal
Protocol	3GPP / AISG 2.0 Multi Type RET

Port Layout

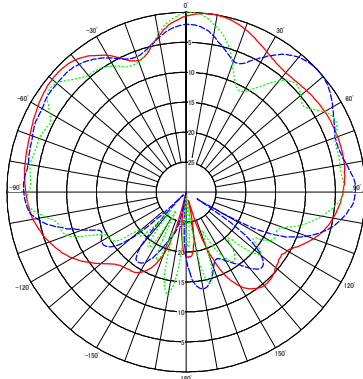


Antenna Array Configurations



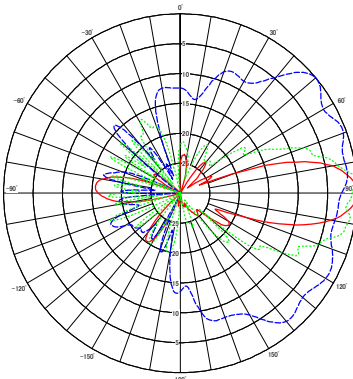
Horizontal Plane

— 1.9GHz — 3.6GHz — 5.2GHz



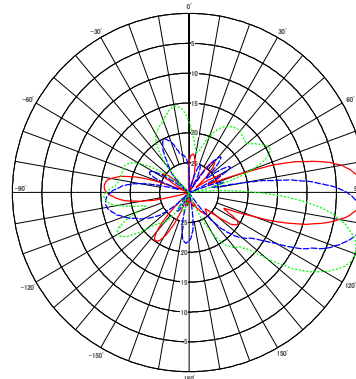
Vertical Plane

— 1.9GHz — 3.6GHz — 5.2GHz

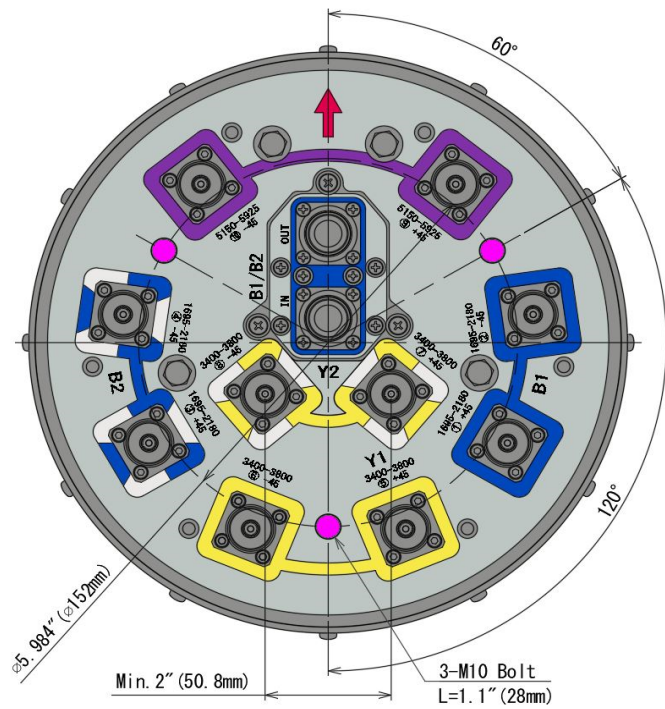


Vertical Pattern (Tilt Angle: 0-10-20[deg.]) 1.9GHz

— tilt0 [deg.] — tilt10 [deg.] — tilt20 [deg.]



Antenna Outline and Bottom View



Ordering Option and Accessories

Mounting Bracket

Description	Part Number	Desing for reference
Mount Adapter [Wind Velocity : 241.4 km/h (150 mile/h)] [Weight : 2.5 kg (5.5 lb)]	DKAB-A001	
Side Mount Bracket [Wind Velocity : 241.4 km/h (150 mile/h)] [Weight : 2.9 kg (6.4 lb)]	DKAB-A002	