

TA 868 MHz AECK-868 Circular Patch Antenna, 245 x 235 x 40mm



Product description:

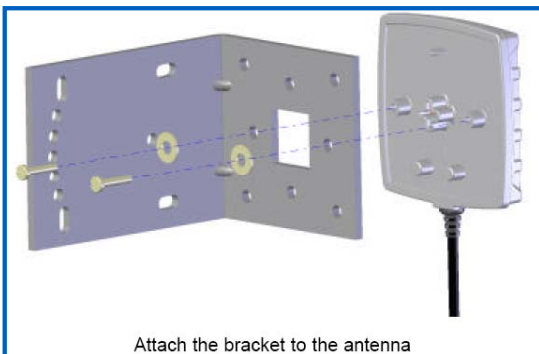
- This antenna covers both EU and USA RFID bands.
- The antenna AECK-868 has been designed to be waterproof and is easy to install.
- It is circularly polarized for reading in any orientation.
- It can be used for improved indoor GSM coverage, due to circular polarization.
- VSWR is typically less than 1.3:1, giving a return loss better than 20dB.



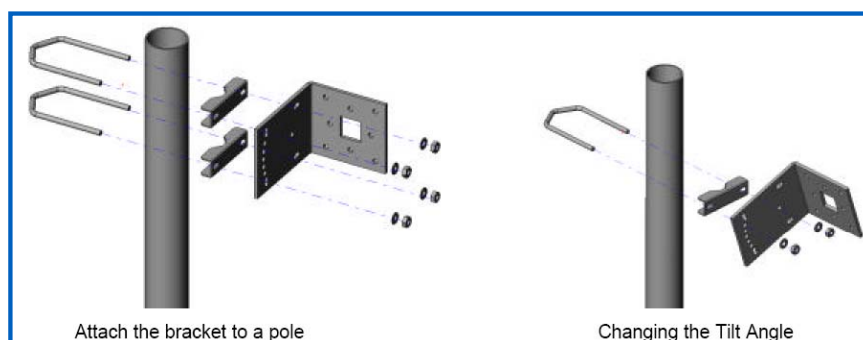
Features:

- 860 – 960 MHz
- Extremely low VSWR return loss
- Circularly polarized
- Low axial ratio for optimum transmitted power

Mounting instructions using the optional mast bracket:

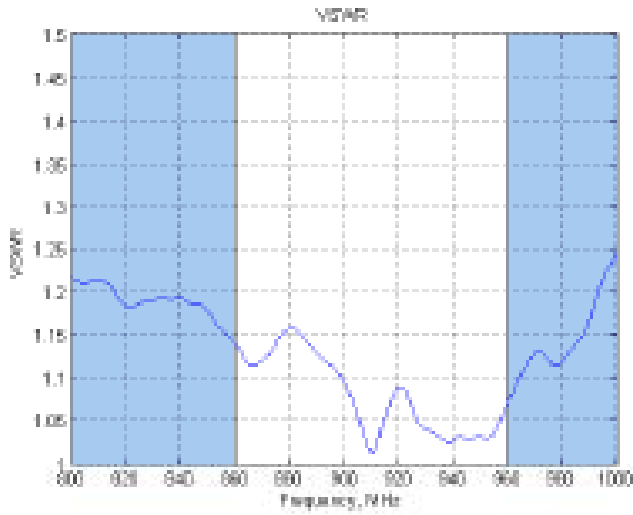


- Attach the L bracket to the antenna by means of the two NO. 10x13mm self tapping screws provided. The figure left illustrates this for vertical polarization.
- Attach the enclosure to a mast (diameter 40-50mm) using the Econo-bracket assembly as shown in below.
- The Econo-bracket can be mounted through different holes to achieve the desired tilt angle of the antenna.
- For outside installation thoroughly seal connectors with self vulcanizing tape to stop water ingress.

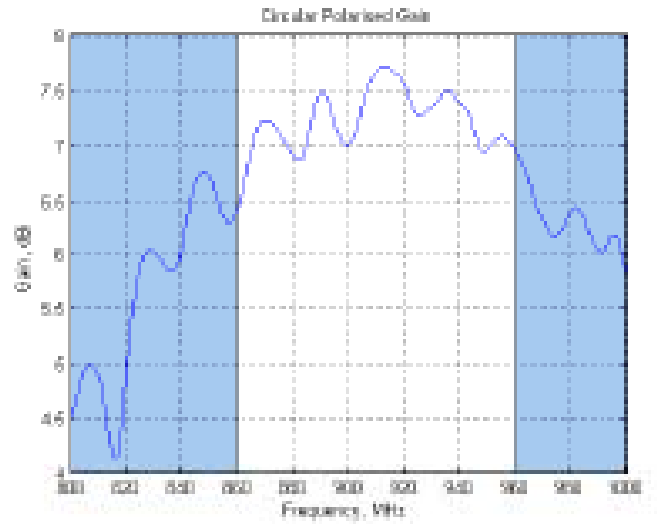


VSWR & Gain Measurements

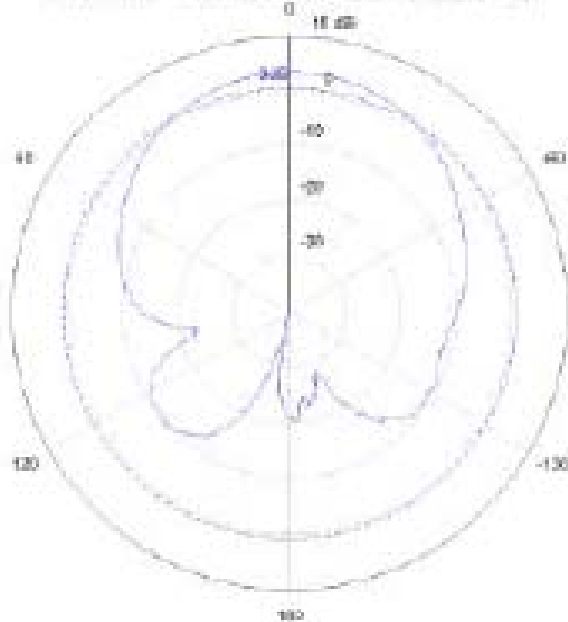
VSWR:



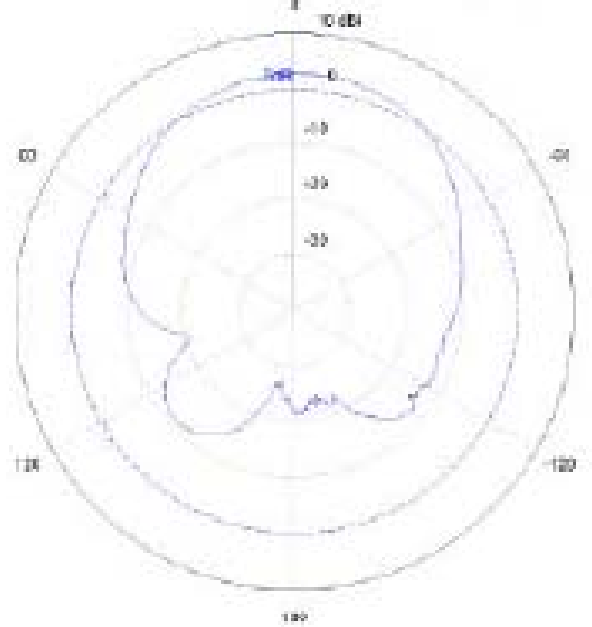
Gain



PATCH-00004 Radiation Pattern Horizontal - Vertical (500 MHz)



PATCH-00002 Radiation Pattern Vertical - Vertical (500 MHz)



<u>Technical specification:</u>	
<u>Electrical</u>	
Gain (max)	7 dBi (± 1 dBi)
Gain (min over the band)	6.5 dBi (± 0.5 dBi)
Frequency:	860 – 960 MHz
VSWR:	< 1.3:1
Axial ratio:	< 1 dB
Feed power handling:	10 W
E-plane 3 dB beamwidth:	67° ($\pm 5^\circ$)
H-plane 3 dB beamwidth:	69° ($\pm 5^\circ$)
Front to back (F/B ratio):	20 dB (± 3 dB)
Nominal input impedance:	50 Ohm
Polarization:	Circular LHCP
<u>Environmental</u>	
Wind loading:	160 km/h (without ice)
Temperature range:	-20°C up to +70°C
Shock:	40g at 10 msec
Thermal shock (10 cycles):	-20°C up to +70°C
Water ingress rating:	IP65 (NEMA 4X)
<u>Mechanical</u>	
Dimensions (l x w x d):	245 x 235 x 40 mm
Weight:	470 g
Connector:	- Connector-N → Cable length: 30cm - Optional: SMA connector → Cable length: 6m
Order number:	E4002.010056 – AECK-868 Circular Patch Antenna
	E4002.000127 – Optional mast bracket
	E4002.000128 – Optional cable 6m SMA connector