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Powertec 4G Narrowband Yagi Antenna, 703 to 790 MHz, 4.3-10 Female

SKU
ANT-PT-00005
MPN
LYU-7079-13.432
Barcode
9337692002410

Description

Powertec's narrowband 700 MHz Yagi antenna has been optimised specifically for Band 28 700 MHz 4G IoT technologies such as LTE-M and NB-IoT. With B28's tendency to scatter over long ranges the antenna was designed with a 13 dBi gain, which provides a 35° nominal azimuth and elevation beam. This wider beam allows more effective handling of multipath.

Designed solely for operation on the 700 MHz band, this allows the antenna's VSWR to be finely tuned and ensuring maximum conducted power and receive sensitivity.

The antenna has a single 4.3-10 female connector on a short cable tail, providing IP67 weatherproof interconnection to a feeder cable. The included pole mount bracket permits rotating of the antenna boom in vertical, horizontal, and slant polarisations.

This antenna was developed by Powertec to facilitate long range IoT connections over the Telstra 700 MHz NB-IoT and LTE-M (Cat-M1/M2) networks. The model makes for an ideal companion for a range of B28 LTE technologies and can be arranged in 2x2 MIMO by setting up a pair of yagi antennas separated by 600 mm.

The antenna is attached with supplied stainless steel pole jaw-clamps.



Powertec

Powertec is a wireless technology manufacturer and systems integrator based in Australia. Operating since 1995, Powertec has grown to become the leading wireless technology distributor in its region, and a leading Infratech systems developer. Supporting over 1500 partners the company provides procurement, design, project management, and support services across Australia, New Zealand, Pacific ...

RF Specification

Start Frequency
703 MHz
Stop Frequency
790 MHz
Max. Input Power
100 W
Polarisation
Linear
Input Impedance
50 Ω
RF Connectors

Ports	RF Interface	Body Shape	Cable Series	Length
1	4.3-10 Female	Straight	RG-402	300 mm

Frequency Test Data

Start Freq.	Stop Freq.	Peak Gain	VSWR	Azimuth	Elevation	F/B Ratio
703 MHz	725 MHz	12.6 dBi	< 1.35:1	37°	36°	> 20 dB
725 MHz	746 MHz	12.7 dBi	< 1.23:1	37°	35°	> 21 dB
746 MHz	768 MHz	13.1 dBi	< 1.1:1	36°	35°	> 19 dB
768 MHz	790 MHz	12.8 dBi	< 1.3:1	38°	33°	> 21 dB

Physical Specification

Subtype
Yagi
Input Ports
1
MIMO
1x1 SISO
Min. Operating Temperature
-40 °C
Max. Operating Temperature
70 °C
Dimensions
1380 x 210 x 65
Materials
Aluminium

Mounting

Pole Clamp 25 to 52 mm ⌀

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