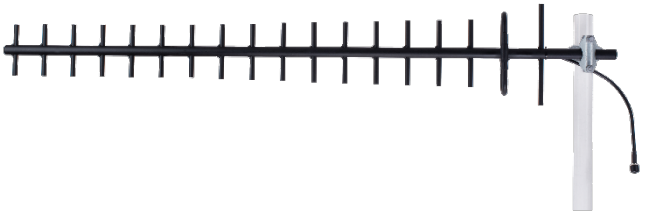
Blackhawk 4GX Yagi Antenna, 700 to 890 MHz

Model Number

LYU-7089-14.N2

Order Code

ANT-BH-YG-100



Polarisation

SISO

Design Type

Yagi-Uda

RF Category

Cellular

Blackhawk's 14 dBi Yagi antenna is one of the most popular installed 3G / 4GX antennas in Australia. This antenna is the ideal antenna for Cel-Fi GO repeaters that need to connect to a cell tower over a long distance.

With the shutdown of the Telstra 3G network already underway, it's critical that any antenna being installed today is compatible with the Telstra 4GX (700 MHz) network which has been implemented alongside it as its replacement.

The Yagi antenna is tuned to a 200 MHz bandwidth @ VSWR ~2:1 from 690 to 890 MHz. This allows the one high gain antenna to operate on both 850 MHz 3G and 700 MHz 4G without any major compromise in performance. Once the 3G network has been shut off the antenna will then provide connectivity over the 5G NR850 network which will take its place.

With a 13 to 14 dBi gain, the antenna is designed to operate in rural and regional areas, out to about 40 kilometres from the nearest base station. This gain provides a good compromise between high gain and narrow beamwidth. Antennas need to maintain a reasonably wide beam (around 35 degrees in this case) to capture reflected and delayed radio paths that your device can digitally reconstruct.

- Ideal for 700 MHz 4G and 850 MHz 5G
- Fully welded, powder coat aluminium design
- Galvanised steel mounting clamp included
- 30 cm tail with pre-terminated N Female connector

Antenna Technical Data

PHYSICAL CHARACTERISTICS

Construction Material	Aluminium	RF Connections	1
Radome Colour	Black Powder Coat	Environmental Rating	No Data
Dimensions	1290 x 210 x 70 mm	Operating Temperature	-40 °C to 70 °C
Weight	1.1 kg	Mounting	Pole mount Ø 30-52 mm

ELECTRICAL SPECIFICATIONS

MECHANICAL SPECIFICATIONS

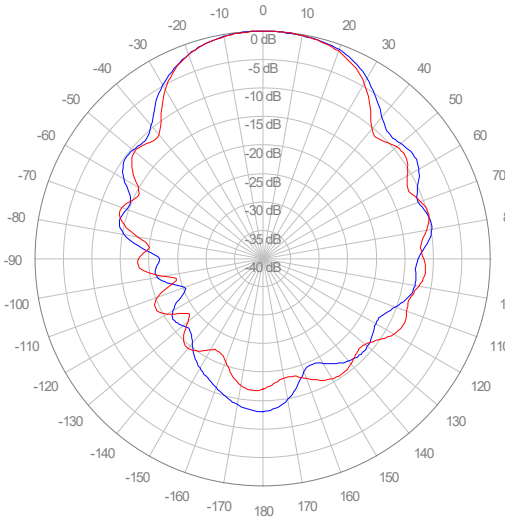
Input Impedance	50 Ω	Input Connector	N
Polarisation	Vertical (V)	Input Connector Gender	Female
Max. Input Power	50 W	Cable Series	RG-142
PIM, 3rd Order	-	Cable Length	300 mm

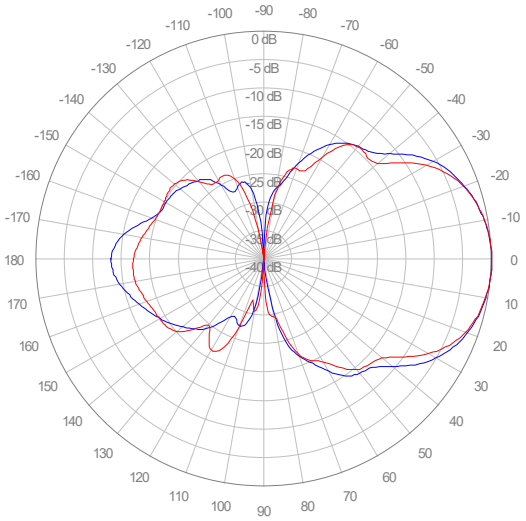
FREQUENCY RANGE	PEAK GAIN	VSWR	AZ.	EL.	F/B RATIO	INTER-PORT	XPI
703 to 790 MHz	13.0 dBi	< 1.8:1	45°	40°	> 16 dB		
790 to 890 MHz	14.0 dBi	< 1.5:1	37°	33°	> 17 dB		

AZIMUTH POLAR PLOT

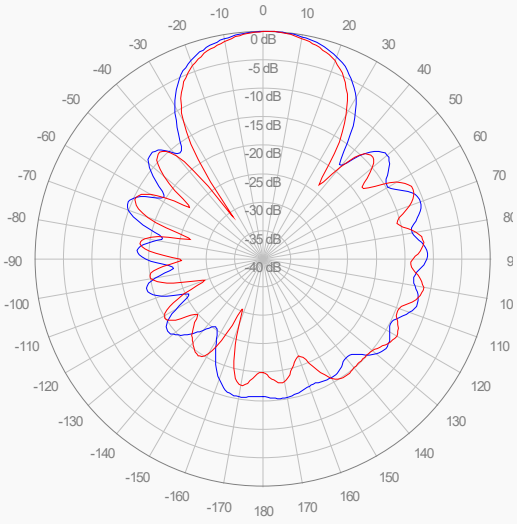
ELEVATION POLAR PLOT

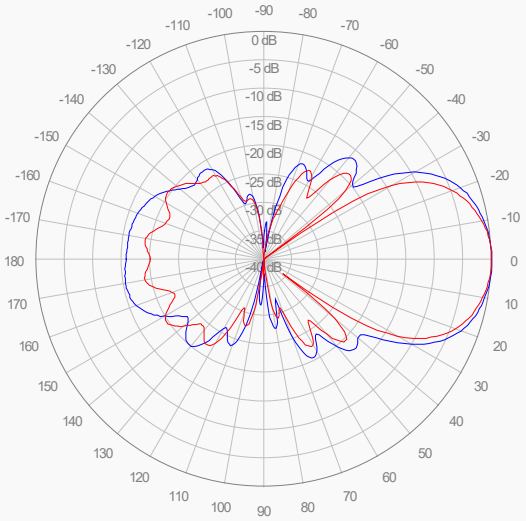
700 to 790 MHz





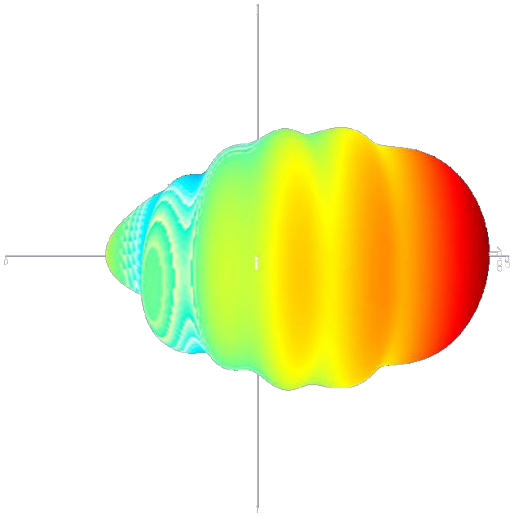
790 to 890 MHz



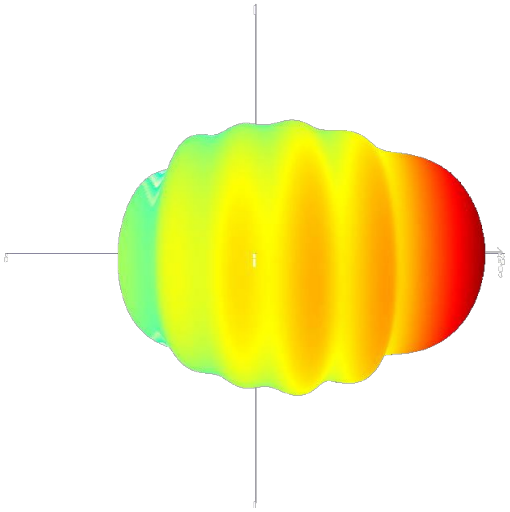


3D RADIATION PATTERNS

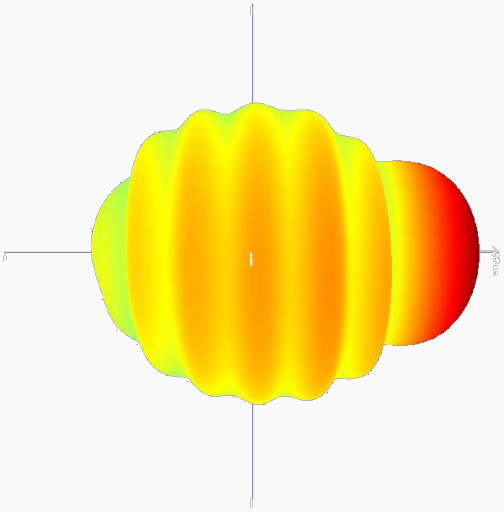
723 MHz



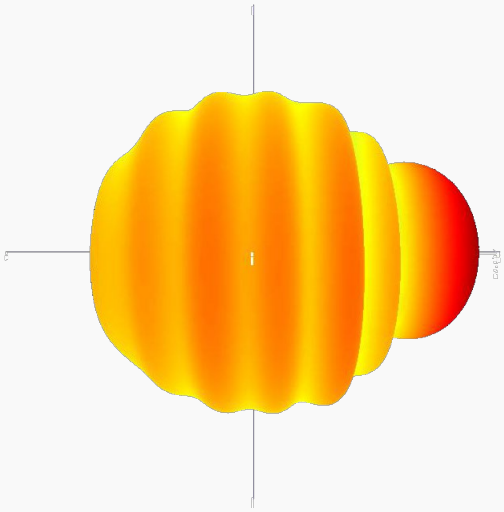
778 MHz



840 MHz



885 MHz



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