



Outdoor 5G Directional Antenna IDLP-5GA01-DANOO-OPN

Item 6424

This outdoor antenna (ODA) is a dual polarisation high-gain directional antenna designed to receive and transmit 5G signals from an indoor 5G modem. The antenna offers 17dBi peak gain for the 3.6GHz 5G band (3400 MHz – 3800 MHz range).

The unit design features an optional built-in calibration circuitry. This allows cable loss calibration to be performed when used in conjunction with a compatible Calibration IDU, limiting the antenna output power to permitted transmit EIRP levels while maintaining high performance receive capabilities at the same time. Internal switching between calibration and operation modes is controlled from the IDU via a DC voltage on the coax cable. With no DC voltage applied, the antenna will be in operation mode and isolated from the IDU.

A compatible wall mount is included.

Key features

- Dual Polarization, High Gain Directional Antenna
- Operating Frequency 3.6GHz 5G band with 17dBi gain
- Compatible with Calibration IDU for Transmit EIRP EMF limit compliance
- 75 Ohm 2x F-Female Ports Interface to IDU
- Diecast chassis
- Weatherproof
- Surge protection
- Wall or pole mountable, Ø32mm









5G Antenna Calibration IDU

IDLP-5GA01-IDU00-OPN

Item 6423

The Calibration IDU provides an interface between a 5G gateway modem and the outdoor antenna (ODA). The IDU function is to compensate for antenna gain and coaxial cable losses to ensure that transmit power levels do not exceed a permitted EIRP limits while optimum sensitivity is maintained for Rx signals.

The IDU contains a signal source used only during calibration and high-speed power detectors used for both calibration and detection of the transmit power level at the 50R ports. Calibration is performed automatically after a power cycle. During calibration, internal variable attenuators are set to control overall system gain level (IDU + Cabling + ODA) to a maximum of 3dB, a value configurable at production (e.g. if the gateway Tx power is +20dBm max., the max. total Tx power will be +23dBm).

The IDU is supplied with a dual SMA male-SMA male cable to connect with the 5G gateway. For connecting the IDU and the ODA, a 6GHz-rated RG6 cable is recommended.

Key features

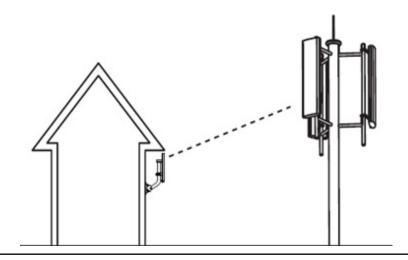
- Warrants EMF limit compliance of the 5G Transmit EIRP
- Small footprint with a single board construction for optimum reliability
- 50 Ohm SMA female interface to 5G gateway / 75 Ohm F-Female Interface to ODA
- Diecast chassis
- Low power consumption, powered from USB port 5V/150mA
- Low Insertion Loss
- Overload and Short circuit protected
- Surge protection
- Dual Channel
- Operating Frequency 3.6GHz band



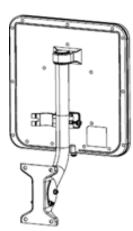


Installation

Choose a location with line of sight to the nearest cell site. This is a directional 5G antenna and will need to be accurately pointed directly at the cell site as misalignment could degrade signal reception.



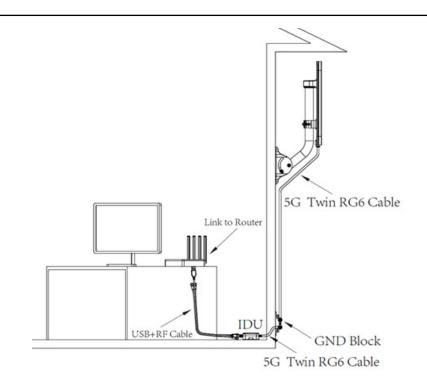
Mount the base to an external wall, assemble the pole and slide the antenna (ODA) onto the pole.



Run two 6GHz rated RG6 Cables fromODA to IDU. It is recommended to use a Ground Block to provide effective grounding to the installation and protect the equipment from lightning strikes.

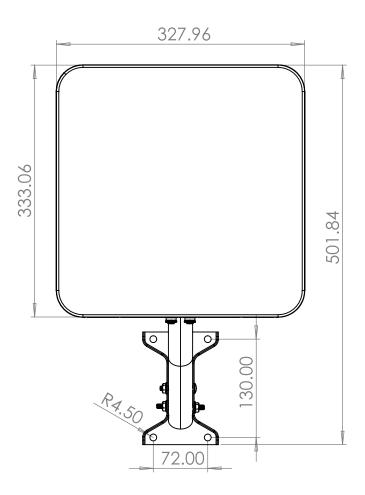
Connect RF cables from IDU to 5G gateway/Router.

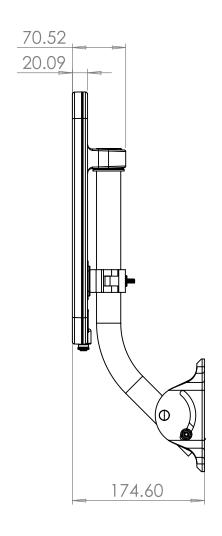
Power the IDU from a USB power adapter (max. rating 5V/500mA)

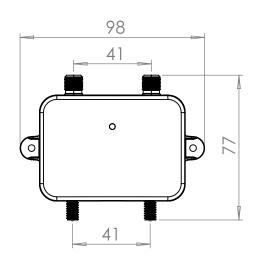


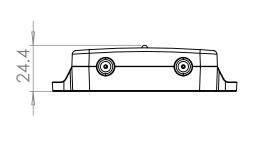


Dimensions









For purpose of brevity, some product descriptions in this sheet remain at platform level and may not be referred to as detailed datasheets of the products. Inverto Digital Labs reserves the right to amend, omit or add products, product-lines, and / or features without notice.