



# Alpha 8

4G LTE/LoRa/Bluetooth Flat Blade Antenna



## Key Features

- IP67 rated
- Supports Key 4G LTE Frequencies
- Supports 2.4 GHz Wi-Fi / Bluetooth / Zigbee
- Supports LoRa / Sigfox / ISM 868 MHz
- Supports some 5G NR / 4G LTE / 3G UMTS Bands
- Supports key Cat M, NB-IoT Bands
- Compact size and covert / anti-vandal design

## General Description

The Alpha 8 has been tuned for 2.4 GHz use, with additional support for 868 MHz for LoRa applications in Europe. This antenna also covers the Key 4G LTE, NB-IoT and Cat M bands.

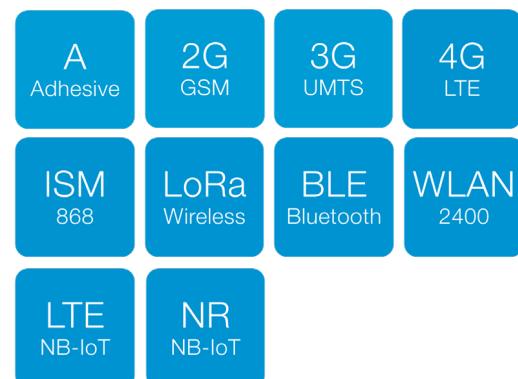
The dipole PCB of the Alpha 8 is encased and heat sealed to protect against moisture ingress and is versatile enough to fit in many environments.

Supplied with various cable lengths and connector options, it is a reliable design which is already field proven, making it ideal for today's telemetry applications which demand effective performance at a competitive price.

Alternative cable lengths and connector types can be specified for volume orders.

## Additional Considerations

- Sealed housing protects against moisture ingress
- Low profile and ultra thin design allows installation into many applications





Enabling Industrial IoT



## Alpha 8

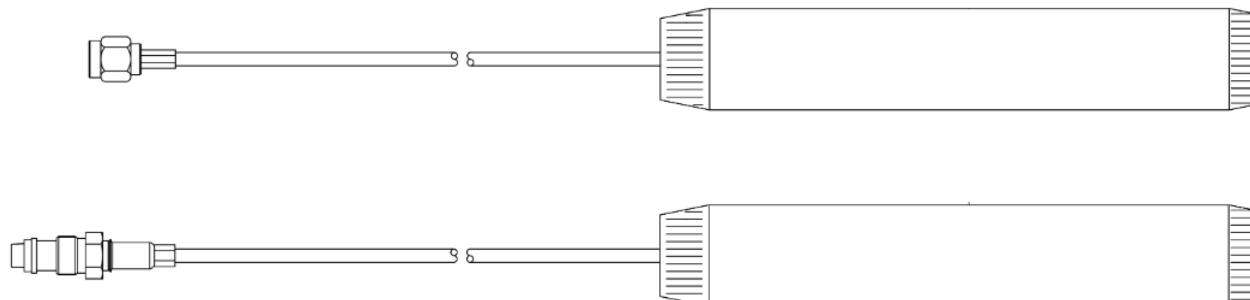
4G LTE/LoRa/Bluetooth Flat Blade Antenna

### Electrical Specifications

Temperature range:	-40 - +85°C
Impedance:	50 Ohm
Peak Gain:	2dBi
VSWR:	<3.2:1 across all operating frequencies
	824 - 960 MHz
Operating frequencies:	1710 - 1990 MHz
	2100 - 2600MHz
Polarization:	Vertical
Radiating element:	End fed dipole
Ground Plane Independent:	No
Max Input Power:	6W

### Mechanical Specifications

Dimensions:	113 x 21 x 3mm (without cable)
Weight:	5g
Cable:	RG174
Connector:	SMA Male / FME Female
Main Material:	NP-140TL-B





Enabling Industrial IoT

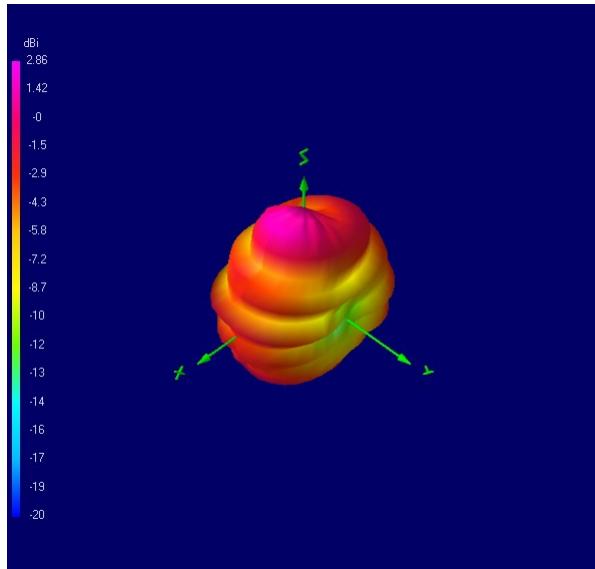


## Alpha 8

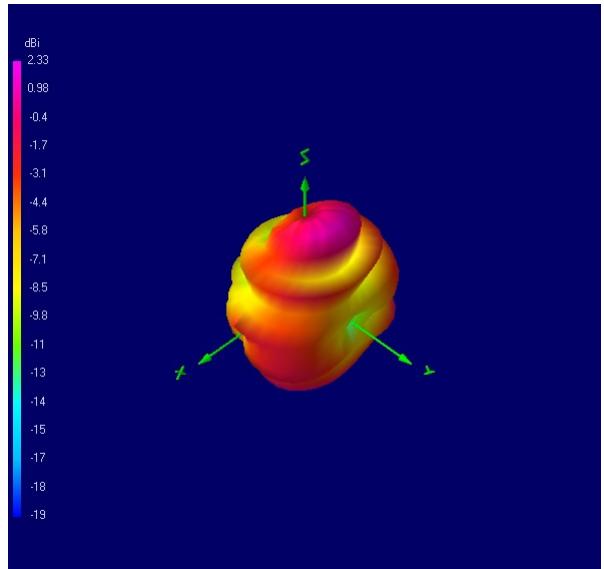
4G LTE/LoRa/Bluetooth Flat Blade Antenna

### Radiation Plots

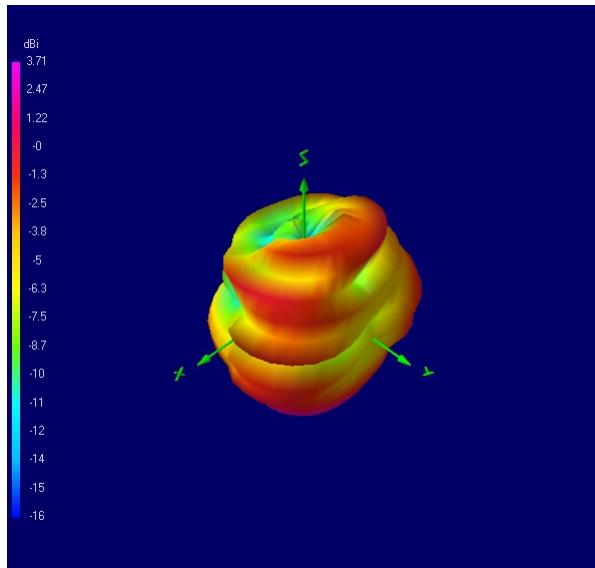
868 MHz



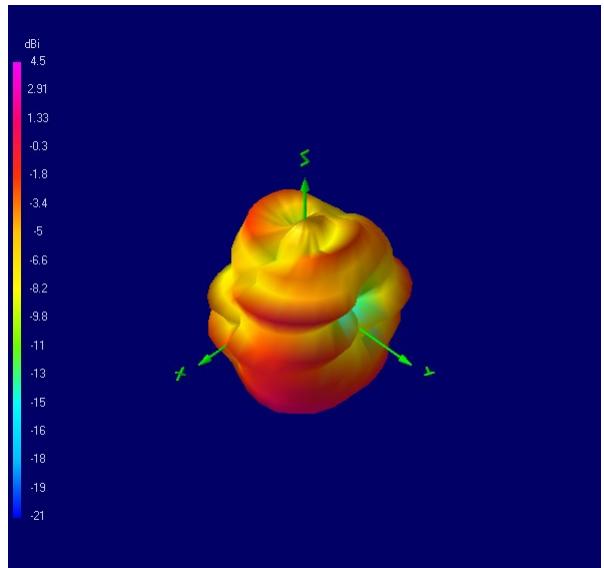
1700 MHz



1800 MHz



1900 MHz





Enabling Industrial IoT

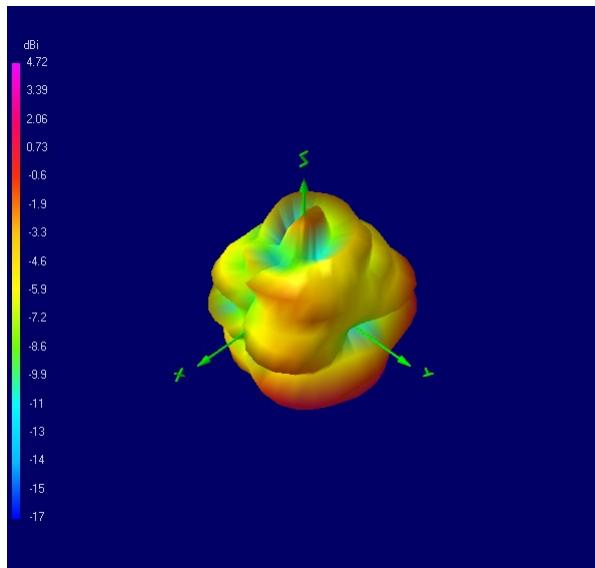


## Alpha 8

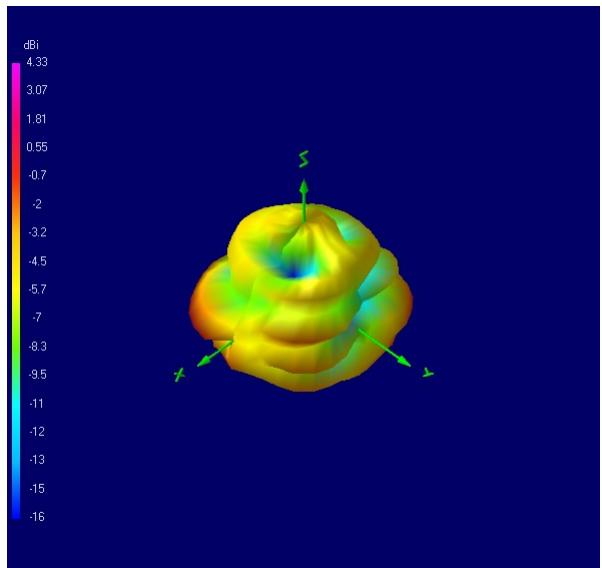
4G LTE/LoRa/Bluetooth Flat Blade Antenna

### Radiation Plots

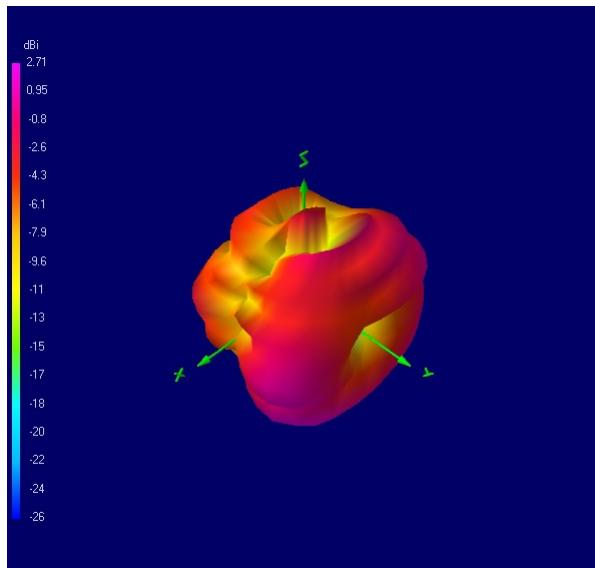
2000 MHz



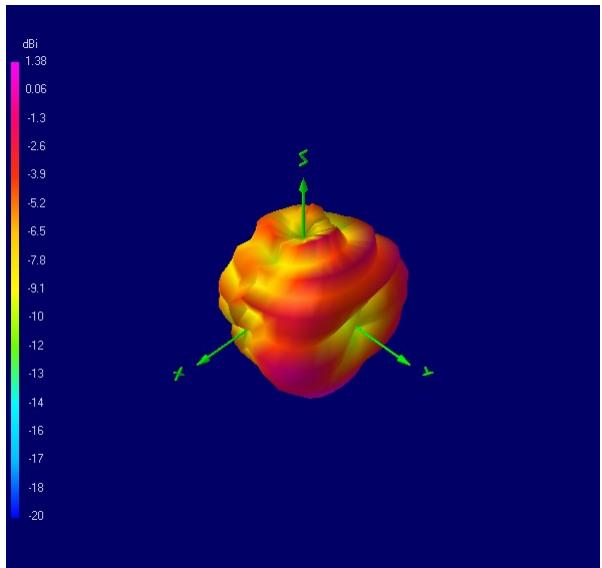
2100 MHz



2400 MHz



2600 MHz





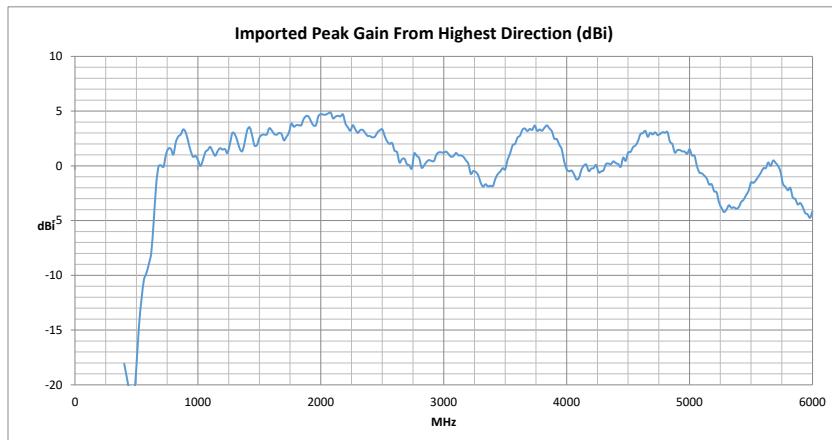
Enabling Industrial IoT



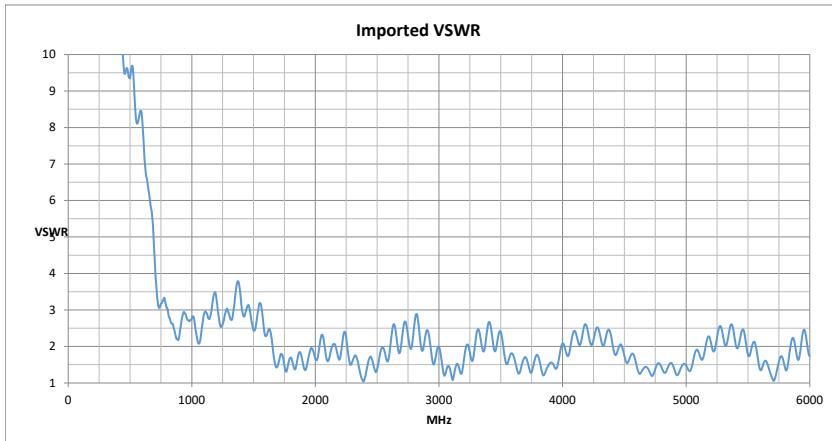
## Alpha 8

4G LTE/LoRa/Bluetooth Flat Blade Antenna

### Peak Gain From Highest Direction (dBi)



### VSWR



### Ordering Details

Part number	Description
ALPHA8/1M/FMEF/S/S/11	4G LTE/LORA/BLUETOOTH FLAT BLADE ANTENNA 1M CABLE FME FEMALE CONNECTOR
ALPHA8/1M/SMAM/S/S/11	4G LTE/LORA/BLUETOOTH FLAT BLADE ANTENNA 1M CABLE SMA MALE CONNECTOR
ALPHA8/3M/FMEF/S/S/11	4G LTE/LORA/BLUETOOTH FLAT BLADE ANTENNA 3M CABLE FME FEMALE CONNECTOR
ALPHA8/3M/SMAM/S/S/11	4G LTE/LORA/BLUETOOTH FLAT BLADE ANTENNA 3M CABLE SMA MALE CONNECTOR