Antenna Catalog

Cellular · Sub-1 GHz LPWAN & ISM · WiFi/WLAN · 2.4 GHz ISM · GNSS · MIMO · UHF/VHF · Other Antennas · Antenna Mounts

MAP electronics co., ltd.
Material All Procurement

Catalog Organization

Antenna product listings are grouped by application, mounting location and mounting type as defined below. Within each grouping, antennas are listed by part number and series, summary applications and characteristics, and termination type for ease of product selection. An asterisk (*) may be used in a part number to denote multiple antenna termination options or cable length options.

Application

Cellular

MAP Electronics cellular antennas support cellular and cellular IoT/cellular LPWA applications including:

- 5G, 4G, 3G, 2G
- LTE, UMTS, GSM
- LTE-M (Cat-M1)
- NB-IoT
- CBRS

Sub-1 GHz LPWA & ISM

MAP Electronics sub-1 GHz antennas for LPWA and ISM applications offer single-band options in multiple styles, mounting, and terminations at 433 MHz, 490 MHz, 868 MHz and 915 MHz in support of applications including:

- LoRaWAN®
- Sigfox®
- Weightless-P™
- WiFi HaLow™

WiFi/WLAN

MAP Electronics Tri-band 2.4 GHz, 5 GHz and 6 GHz antenna solutions target wireless LAN (WiFi/WLAN) applications includ-ing:

- WiFi 7/ WiFi 6E
- WiFi 6
- WiFi 5
- WiFi 4
- U-NII 1-4, 5-8
- 802.11b/g/n/ac/ax/be

2.4 GHz ISM

MAP Electronics 2.4 GHz single-band antennas provide a broad range of styles, mounting, termination and levels of perfor-mance to accommodate ISM applications including:

- Bluetooth®
- ZigBee®
- Thread®
- IEEE 802.11b/g
- IEEE 802.15.4

GNSS

MAP Electronics offers global navigation satellite system (GNSS) antennas for systems including:

- GPS
- Galileo
- GLONASS
- BeiDou/COMPASS

Other

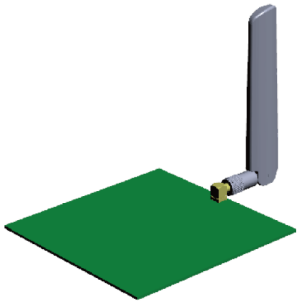
- NFC, UWB
- VHF/UHF
- 403 MHz
- 418 MHz

Mounting Location

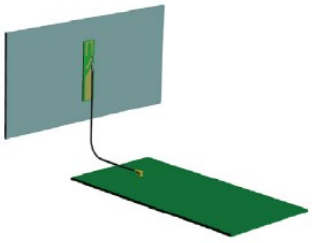
Internal/Embedded	Antenna mounts inside an enclosure
External	Antenna mounts on the outside of an enclosure
Remote	Antenna mounts away from an enclosure with cabled connection to the enclosure

Mounting Type

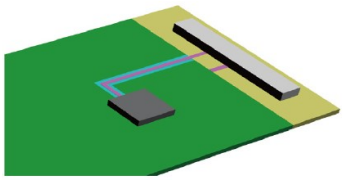
Connector	Connector (e.g. SMA) directly attaches antenna to mounting location
Adhesive	Antenna mounts to mounting location using adhesive
Surface Mount	Antenna mounts directly to printed circuit board with surface mount solder connection
Panel Mount	Antenna mounts to enclosure panel/surface and signal connects to radio via cable
Bracket	Antenna mounts to mounting location via bracket
Magnetic	Antenna mounts to mounting location via magnetic base
Through Hole	Antenna mounts to printed circuit board with a through hole solder connection



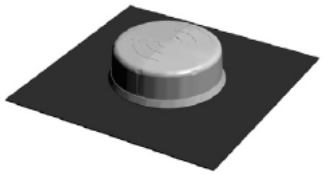
Connector Mount



Adhesive Mount

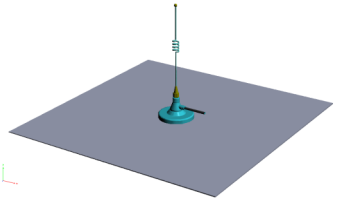


Surface Mount

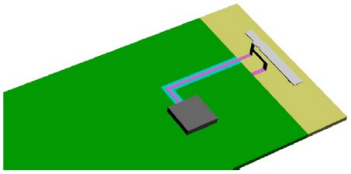


Panel Mount

Bracket Mount



Magnetic Mount



Through Hole Mount

TABLE OF CONTENT

Cellular Antennas

MAP Electronics antennas offer a various range of types, mounting and connections, supporting cellular and cellular IoT ap-plications including:

- 5G, 4G, 3G, 2G
- LTE, UMTS, GSM
- LTE-M (Cat-M1)
- NB-IoT
- CBRS

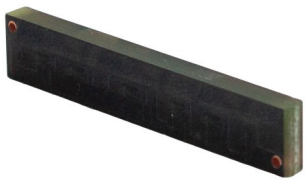
Data is provided by frequency band in MHz. LTE/5G NR band names may be cross-referenced to frequencies using the band table on pages 61, 62 and 63.

Internal

Surface Mount

MEZRD-C042XX3B

New



Overview

5G Cellular Multi-band Monopole PCB Chip

Applications

5G NR FR1, 4G LTE, UMTS, GSM, LTE-M (Cat-M1), NB-IoT, CBRS

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
617-960	2.8	1.4	47
1710-2690	3.0	4.8	60
3300-4200	2.4	3.1	52
4400-5000	2.3	3.3	62
5150-5850	2.8	4.8	58
5925-7125	2.5	3.7	55

Polarization	Linear
Wavelength	¼-λ
Electrical Type	Monopole
Radiation Pattern	Omni directional
Impedance (Ohms)	50

Mechanical Data

Mounting Type	Surface Mount
Termination	Solder Pad
Dimensions	42x7.5x3.2 mm
Op. Temp.	-40℃ to +85℃
Ground Plane	140 x 50 mm

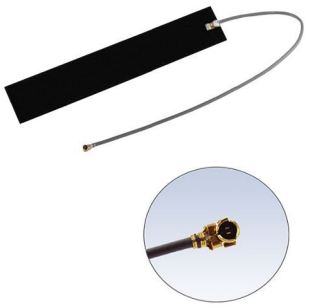
Cellular

Internal

Adhesive Mount

MEZRF-V092MP3B-*

New



Overview

5G/LTE Cellular Multiband Adhesive Dipole PCB Rigid Flat Patch with Coax Cable

Applications

5G NR FR1, 4G LTE, UMTS, GSM, LTE-M (Cat-M1), NB-IoT, CBRS

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
617-960	3.0	3.1	35
1710-2690	2.1	4.0	55
3300-4200	1.9	2.6	49
4400-5000	1.9	4.3	53
5150-5850	1.8	4.0	50
5925-7125	2.9	5.1	38
Polarization		Linear	
Wavelength		½-λ	
Electrical Type		Dipole	
Radiation Pattern		Omni directional	
Impedance (Ohms)		50	

Mechanical Data

Mounting Type	Adhesive Mount
Termination*	MHF1 Plug MHF4L Plug
Dimensions	92x18x1.1 mm
Op. Temp.	-40˚C to +85˚C
Cable Type	⌀1.13 mm
Cable Length*	60 mm 120 mm 180 mm

MEZBF-V100MP3B-*

New

Overview

5G/LTE Cellular Multiband Adhesive Dipole FPC Flexible Flat Patch with Coax Cable

Applications

5G NR FR1, 4G LTE, UMTS, GSM, LTE-M (Cat-M1), NB-IoT, CBRS

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
617-960	2.4	3.3	43
1710-2690	2.0	4.1	53
3300-4200	1.7	3.1	51
4400-5000	2.0	4.1	57
5150-5850	1.8	4.8	56
5925-7125	1.9	5.0	42
Polarization		Linear	
Wavelength		½-λ	
Electrical Type		Dipole	
Radiation Pattern		Omni directional	
Impedance (Ohms)		50	

Mechanical Data

Mounting Type	Adhesive Mount
Termination*	MHF1 Plug MHF4L Plug
Dimensions	100x18x0.25 mm
Op. Temp.	-40˚C to +85˚C
Cable Type	⌀1.13 mm
Cable Length*	60 mm 120 mm 180 mm

Cellular

External

Connector Mount

MEZWX-180ASA3B

Overview

Outdoor 5G Cellular Multiband Tilt/Swivel Dipole Whip

Applications

5G NR FR1, 4G LTE, UMTS, GSM, LTE-M (Cat-M1), NB-IoT, CBRS

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
617-960	2.5	1.5	38
1710-2690	3.2	2.8	44
3300-4200	2.0	2.8	47
4400-5000	1.7	2.4	43
5150-5850	2.6	2.6	48
5925-7125	2.8	3.1	43

Polarization	Linear
Wavelength	½-λ
Electrical Type	Dipole
Radiation Pattern	Omni directional
Impedance (Ohms)	50

Mechanical Data

Mounting Type	Connector Mount
Termination*	SMA Plug RP-SMA Plug
Dimensions	203x⌀13 mm
Op. Temp.	-30˚C to +70˚C
IP Rating	IP67

MEZWX-180BSA3B

Overview

5G Cellular Multiband Tilt/Swivel Dipole Whip

Applications

5G NR FR1, 4G LTE, UMTS, GSM, LTE-M (Cat-M1), NB-IoT, CBRS

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
617-960	2.5	1.5	38
1710-2690	3.2	2.8	44
3300-4200	2.0	2.8	47
4400-5000	1.7	2.4	43
5150-5850	2.6	2.6	48
5925-7125	2.8	3.1	43

Polarization	Linear
Wavelength	½-λ
Electrical Type	Dipole
Radiation Pattern	Omni directional
Impedance (Ohms)	50

Mechanical Data

Mounting Type	Connector Mount
Termination*	SMA Plug RP-SMA Plug
Dimensions	203x⌀13 mm
Op. Temp.	-30˚C to +70˚C

MEYWX-100BSA2B

Overview

4G LTE Cellular Multiband Tilt/Swivel Monopole Whip

Applications

4G LTE, UMTS, LTE-M (Cat-M1), NB-IoT, GSM, LPWA

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
617-960	2.4	0	35
1710-2170	2.2	-0.1	32
2300-2700	2.7	0	34

Polarization	Linear
Wavelength	½-λ
Electrical Type	Dipole
Radiation Pattern	Omni directional
Impedance (Ohms)	50

Mechanical Data

Mounting Type	Connector Mount
Termination*	SMA Plug RP-SMA Plug
Dimensions	124x⌀13 mm
Op. Temp.	-30˚C to +70˚C

MECWX-291XSAXB

Overview

Cellular Multiband Tilt/Swivel Monopole Whip

Applications

LTE-M (Cat-M1), NB-IoT, GSM, LPWA

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
860-930	2.7	1.3	50
1710-2170	2.7	2.5	65

Polarization	Linear
Wavelength	¼-λ
Electrical Type	Monopole
Radiation Pattern	Omni directional
Impedance (Ohms)	50

Mechanical Data

Mounting Type	Connector Mount
Termination*	SMA Plug RP-SMA Plug
Dimensions	70x⌀13 mm
Op. Temp.	-30˚C to +70˚C
Ground Plane	120 x 120 mm

Cellular

External

Connector Mount

MEZGX-1023NF3W

Overview

Outdoor 5G Cellular Multiband Dipole Fiberglass Baton/Stick

Applications

5G NR FR1, 4G LTE, UMTS, GSM, LTE-M (Cat-M1), NB-IoT, CBRS

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
617-960	2.2	2.4	47
1710-2690	2.7	2.7	49
3300-4200	2.3	3.3	52
4400-5000	2.8	4.3	43
5150-5850	2.4	4.8	57
5925-7125	2.5	3.8	52

Polarization	Linear
Wavelength	½-λ
Electrical Type	Dipole
Radiation Pattern	Omni directional
Impedance (Ohms)	50

Mechanical Data

Mounting Type	Connector Mount
Termination*	N-Type Jack N-Type Plug
Dimensions	145x⌀25 mm
Op. Temp.	-40˚C to +85˚C
IP Rating	IP67

MEZGX-1123NX3W

Overview

Outdoor 5G Cellular Multiband Dipole Fiberglass Baton/Stick

Applications

5G NR FR1, 4G LTE, UMTS, GSM, LTE-M (Cat-M1), NB-IoT, CBRS

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
617-960	2.1	2.7	55
1710-2690	2.5	3.4	65
3300-4200	2.3	2.2	68
4400-5000	3.0	3.6	56
5150-5850	2.4	4.0	58
5925-7125	2.0	4.5	55

Polarization	Linear
Wavelength	½-λ
Electrical Type	Dipole
Radiation Pattern	Omni directional
Impedance (Ohms)	50

Mechanical Data

Mounting Type	Connector Mount
Termination	N-Type Plug
Dimensions	152x⌀24 mm
Op. Temp.	-40˚C to +85˚C
IP Rating	IP67

Cellular

External

Connector Mount

MEZHX-150XNX3B

Overview

5G Cellular Multi-band Straight Dipole Blade

Applications

5G NR FR1, 4G LTE, UMTS, GSM, LTE-M (Cat-M1), NB-IoT, CBRS

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
617-960	2.2	2.2	51
1710-2690	2.8	3.3	53
3300-4200	2.4	2.5	55
4400-5000	3.1	4.3	59
5150-5925	2.7	4.7	53
5925-7125	3.9	4.2	46

Polarization	Linear
Wavelength	½-λ
Electrical Type	Dipole
Radiation Pattern	Omni directional
Impedance (Ohms)	50

Mechanical Data

Mounting Type	Connector Mount
Termination	N-Type Plug
Dimensions	178x⌀21 mm
Op. Temp.	-40˚C to +85˚C
IP Rating	IP67

MEZHX-150XNF3B

New

Overview

5G Cellular Multi-band Straight Dipole Blade

Applications

5G NR FR1, 4G LTE, UMTS, GSM, LTE-M (Cat-M1), NB-IoT, CBRS

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
617-960	2.2	2.2	51
1710-2690	2.8	3.3	53
3300-4200	2.4	2.5	55
4400-5000	3.1	4.3	59
5150-5850	2.7	4.7	53
5925-7125	3.9	4.2	46

Polarization	Linear
Wavelength	½-λ
Electrical Type	Dipole
Radiation Pattern	Omni directional
Impedance (Ohms)	50

Mechanical Data

Mounting Type	Connector Mount
Termination	N-Type Jack
Dimensions	183x⌀21 mm
Op. Temp.	-40˚C to +85˚C
IP Rating	IP67

MEZHX-713ASA4B

New

Overview

5G Cellular Multi-band Straight Dipole Blade

Applications

5G NR FR1, 4G LTE, UMTS, GSM, LTE-M (Cat-M1), NB-IoT, CBRS

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
617-960	2.4	2.1	41
1710-2690	2.0	3.7	49
3300-4200	1.9	2.7	52
4400-5000	1.9	2.8	56
5150-5850	1.6	3.6	55
5925-7125	1.7	3.9	52

Polarization	Linear
Wavelength	½-λ
Electrical Type	Dipole
Radiation Pattern	Omni directional
Impedance (Ohms)	50

Mechanical Data

Mounting Type	Connector Mount
Termination*	SMA Plug RP-SMA Plug
Dimensions	165x26x13 mm
Op. Temp.	-30˚C to +70˚C
IP Rating	IP67

Cellular

External

Connector Mount

MEZWX-713ASA4B

New

Overview

5G Cellular Multi-band Tilt/Swivel Dipole Blade

Applications

5G NR FR1, 4G LTE, UMTS, GSM, LTE-M (Cat-M1), NB-IoT, CBRS

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
617-960	2.1	2.5	43
1710-2690	1.8	4.0	53
3300-4200	1.9	3.2	63
4400-5000	2.5	2.0	49
5150-5850	1.6	3.8	57
5925-7125	1.7	4.1	56
Polarization		Linear	
Wavelength		½-λ	
Electrical Type		Dipole	
Radiation Pattern		Omni directional	
Impedance (Ohms)		50	

Mechanical Data

Mounting Type	Connector Mount
Termination*	SMA Plug RP-SMA Plug
Dimensions	188x27x13 mm
Op. Temp.	-30˚C to +70˚C
IP Rating	IP67

MEZWX-715BSA5B

Overview

450MHz + 5G Cellular Multiband Tilt/Swivel Dipole Blade

Applications

5G NR FR1, 4G LTE, UMTS, GSM, LTE-M (Cat-M1), NB-IoT, CBRS

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
450	1.9	0.9	41
617-960	2.0	1.9	40
1710-2690	2.5	4.3	57
3300-4200	1.4	3.1	63
4400-5000	2.0	2.2	49
5150-5925	1.9	4.4	64
Polarization		Linear	
Wavelength		½-λ	
Electrical Type		Dipole	
Radiation Pattern		Omni directional	
Impedance (Ohms)		50	

Mechanical Data

Mounting Type	Connector Mount
Termination*	SMA Plug RP-SMA Plug
Dimensions	183x28x13mm
Op. Temp.	-30˚C to +70˚C

MEZWX-720XSA3B

Overview

5G Cellular Multi-band Tilt/Swivel Dipole Blade

Applications

5G NR FR1, 4G LTE, UMTS, GSM, LTE-M (Cat-M1), NB-IoT, CBRS

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
698-960	2.2	1.0	56
1710-2690	2.3	2.6	64
3300-4200	2.5	2.4	62
4400-5000	2.3	2.6	61
5150-5850	2.0	2.7	61
5925-7125	2.5	2.5	66
Polarization		Linear	
Wavelength		½-λ	
Electrical Type		Dipole	
Radiation Pattern		Omni directional	
Impedance (Ohms)		50	

Mechanical Data

Mounting Type	Connector Mount
Termination*	SMA Plug RP-SMA Plug
Dimensions	222x28x14 mm
Op. Temp.	-20˚C to +70˚C

Cellular

External

Connector Mount

MEZWX-711BSA3B

Overview

5G Cellular Multi-band Tilt/Swivel Dipole Blade

Applications

5G NR FR1, 4G LTE, UMTS, GSM, LTE-M (Cat-M1), NB-IoT, CBRS

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
617-960	2.5	2.7	54
1710-2690	2.1	3.8	67
3300-4200	1.6	3.0	62
4400-5000	1.8	3.2	52
5150-5850	1.9	2.8	50
5925-7125	2.0	3.5	46

Polarization	Linear
Wavelength	½-λ
Electrical Type	Dipole
Radiation Pattern	Omni directional
Impedance (Ohms)	50

Mechanical Data

Mounting Type	Connector Mount
Termination*	SMA Plug RP-SMA Plug
Dimensions	136x24x11 mm
Op. Temp.	-30˚C to +70˚C

MEZWX-721XSA2B

Overview

5G Cellular Multi-band Tilt/Swivel Dipole Blade

Applications

5G NR FR1, 4G LTE, UMTS, GSM, LTE-M (Cat-M1), NB-IoT, CBRS

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
617-960	2.0	2.1	51
1710-2690	2.9	4.4	65
3300-4200	2.7	2.8	68
4400-5000	2.0	3.7	54
5150-5850	2.6	4.8	52

Polarization	Linear
Wavelength	½-λ
Electrical Type	Dipole
Radiation Pattern	Omni directional
Impedance (Ohms)	50

Mechanical Data

Mounting Type	Connector Mount
Termination*	SMA Plug RP-SMA Plug
Dimensions	150x22x11 mm
Op. Temp.	-20˚C to +70˚C

Cellular

External

Connector Mount

MEZWX-6231SA4B

Overview

450MHz + 5G Cellular Multiband Tilt/Swivel Dipole Blade

Applications

5G NR FR1, 4G LTE, UMTS, GSM, LTE-M (Cat-M1), NB-IoT, CBRS

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
450	1.6	1.2	45
617-960	2.6	2.0	51
1710-2690	2.5	3.5	63
3300-5000	2.0	4.0	60
5150-5850	1.8	4.7	65
5925-7125	1.8	3.8	60
Polarization		Linear	
Wavelength		½-λ	
Electrical Type		Dipole	
Radiation Pattern		Omni directional	
Impedance (Ohms)		50	

Mechanical Data

Mounting Type	Connector Mount
Termination*	SMA Plug RP-SMA Plug
Dimensions	205x25x13mm
Op. Temp.	-30˚C to +70˚C

MEZWX-6141SA3B

Overview

5G Cellular Multi-band Tilt/Swivel Dipole Blade

Applications

5G NR FR1, 4G LTE, UMTS, GSM, LTE-M (Cat-M1), NB-IoT, CBRS

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
617-960	3.2	1.6	41
1710-2690	2.1	4.8	70
3300-4200	1.8	2.0	62
4400-5000	1.7	3.4	63
5150-5850	1.9	3.8	59
5925-7125	2.4	3.5	58
Polarization		Linear	
Wavelength		½-λ	
Electrical Type		Dipole	
Radiation Pattern		Omni directional	
Impedance (Ohms)		50	

Mechanical Data

Mounting Type	Connector Mount
Termination*	SMA Plug RP-SMA Plug
Dimensions	160x22x13 mm
Op. Temp.	-30˚C to +70˚C

MEZWX-6221SA4B

Overview

450MHz + 5G Cellular Multiband Tilt/Swivel Dipole Blade

Applications

5G NR FR1, 4G LTE, UMTS, GSM, LTE-M (Cat-M1), NB-IoT, CBRS

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
450	2.0	1.8	52
617-960	3.0	2.0	76
1710-2690	2.5	3.0	70
3300-4200	2.5	3.5	65
4400-5000	2.0	3.5	66
5150-7125	2.5	3.6	65
Polarization		Linear	
Wavelength		½-λ	
Electrical Type		Dipole	
Radiation Pattern		Omni directional	
Impedance (Ohms)		50	

Mechanical Data

Mounting Type	Connector Mount
Termination*	SMA Plug RP-SMA Plug
Dimensions	237x39x13 mm
Op. Temp.	-30˚C to +70˚C

Cellular

External

Panel Mount

MEZHX-3802NF3B

Overview

5G Cellular Multi-band Dipole Dome/Saltshaker

Applications

5G NR FR1, 4G LTE, UMTS, GSM, LTE-M (Cat-M1), NB-IoT

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
617-960	3.6	4.1	78
1710-2690	2.8	7.1	76
3300-4200	2.3	6.8	70
4400-5000	2.5	6.2	76
5150-5850	2.0	10.0	80
5925-7125	2.8	8.9	75

Polarization	Linear
Wavelength	½-λ
Electrical Type	Dipole
Radiation Pattern	Omni directional
Impedance (Ohms)	50

Mechanical Data

Mounting Type	Panel Mount
Termination	N-Type Jack
Dimensions	77.7x⌀38 mm
Op. Temp.	-40˚C to +85˚C
IP Rating	IP67
Ground Plane	350 x 350 mm

MEZHX-3602NF6B

Overview

5G Cellular Multi-band Dipole Dome/Saltshaker

Applications

5G NR FR1, 4G LTE, UMTS, GSM, LTE-M (Cat-M1), NB-IoT

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
698-960	3.6	2.4	63
1710-2690	2.2	3.8	65
3300-3800	1.8	4.5	51
4200-5000	3.3	3.4	55
5150-5850	3.2	5.1	52

Polarization	Linear
Wavelength	½-λ
Electrical Type	Dipole
Radiation Pattern	Omni directional
Impedance (Ohms)	50

Mechanical Data

Mounting Type	Panel Mount
Termination	N-Type Jack
Dimensions	71x⌀40.2 mm
Op. Temp.	-30˚C to +70˚C
IP Rating	IP65
Ground Plane	350 x 350 mm

Cellular

External

Panel Mount

MEZHF-3802SA3B-*

Overview

5G Cellular Multi-band Dipole Dome /Saltshaker Flying Lead

Applications

5G NR FR1, 4G LTE, UMTS, GSM, LTE-M (Cat-M1), NB-IoT

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
617-960	3.3	2.8	57
1710-2690	2.3	3.2	55
3300-4200	3.3	3.2	35
4400-5000	2.4	3.6	47
5150-5850	2.7	5.7	44
5925-7125	2.8	3.4	32

Polarization	Linear
Wavelength	½-λ
Electrical Type	Dipole
Radiation Pattern	Omni directional
Impedance (Ohms)	50

Mechanical Data

Mounting Type	Panel Mount
Termination	SMA Plug
Dimensions	77.7x⌀38 mm
Op. Temp.	-40˚C to +85˚C
Cable Type	RG58
Cable Length*	1000 mm
	2000 mm
IP Rating	IP67

MEYHF-3602SA3B-*

Overview

4G LTE Cellular Multiband Dipole Dome/Saltshaker Flying Lead

Applications

4G LTE, UMTS, GSM, LTE-M (Cat-M1), NB-IoT

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
698-960	3.6	2.4	63
1710-2690	2.2	3.8	65
3300-3800	1.8	4.5	51
4200-5000	3.3	3.4	55
5150-5850	3.2	5.1	52

Polarization	Linear
Wavelength	½-λ
Electrical Type	Dipole
Radiation Pattern	Omni directional
Impedance (Ohms)	50

Mechanical Data

Mounting Type	Panel Mount
Termination	SMA Plug
Dimensions	71x⌀40.2 mm
Op. Temp.	-30˚C to +70˚C
Cable Type	RG174
Cable Length*	1000 mm
	2000 mm

Cellular

Remote / Rugged

Panel Mount

MEYHF-HA02SA1W-*

Overview

4G LTE Cellular Multiband Rugged Dipole Dome Flying Lead

Applications

4G LTE, UMTS, GSM, LTE-M (Cat-M1), NB-IoT

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
698-960	3.5	2.6	65
1710-2690	2.8	3.1	72

Polarization	Linear
Wavelength	½-λ
Electrical Type	Dipole
Radiation Pattern	Omni directional
Impedance (Ohms)	50

Mechanical Data

Mounting Type	Panel Mount
Termination	SMA Plug
Dimensions	35x⌀169 mm
Op. Temp.	-40℃ to +85℃
Cable Type	RG58
Cable Length*	1000mm 2000mm
IP Rating	IP67

MEZHF-HA04TC2G-*

New

Overview

5G/LTE Cellular Multiband Rugged Dipole Dome burial to roadways

Applications

5G, 4G LTE, UMTS, GSM, LTE-M(Cat-M1), NB-IoT

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
617-960	4.0	1.9	38
1710-2690	3.5	4.3	41
3300-4200	3.7	2.1	32
4400-5000	4.9	2.0	30

Polarization	Linear
Wavelength	½-λ
Electrical Type	Dipole
Radiation Pattern	Omni directional
Impedance (Ohms)	50

Mechanical Data

Mounting Type	Burial Mount
Termination	TNC Plug
Dimensions	55x⌀100 mm
Op. Temp.	-40℃ to +85℃
Cable Type	RG58
Cable Length*	1000mm 2000mm 3000mm
IP Rating	IP67

Cellular

Remote

Adhesive Mount

MEZBF-603XSA3B-*

Overview

5G Cellular Multi-band Straight Dipole Adhesive Bar/Blade, Flying Lead

Applications

5G NR FR1, 4G LTE, UMTS, GSM, LTE-M (Cat-M1), NB-IoT, CBRS

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
617-960	1.9	3.2	46
1710-2690	1.6	2.5	39
3300-4200	1.6	0.3	28
4400-5000	1.6	-1.5	17
5150-5925	1.6	0.5	19
5925-7125	1.8	0.2	13

Polarization	Linear
Wavelength	½-λ
Electrical Type	Dipole
Radiation Pattern	Omni directional
Impedance (Ohms)	50

Mechanical Data

Mounting Type	Adhesive Mount
Termination	SMA Plug
Dimensions	110x20x6 mm
Op. Temp.	-40˚C to +85˚C
Cable Type	RG174
Cable Length*	1000 mm 2000 mm

MECAF-601XSAXB-*

Overview

Cellular Multiband Straight Dipole Adhesive Bar/ Blade, Flying Lead

Applications

LTE-M (Cat-M1), NB-IoT, UMTS, GSM, LPWA

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
824-960	2.0	2.0	53
1710-2170	2.0	2.5	61

Polarization	Linear
Wavelength	½-λ
Electrical Type	Dipole
Radiation Pattern	Omni directional
Impedance (Ohms)	50

Mechanical Data

Mounting Type	Adhesive Mount
Termination	SMA Plug
Dimensions	146x20x13 mm
Op. Temp.	-30˚C to +70˚C
Cable Type	RG174
Cable Length*	1000 mm 2000 mm

MECAF-350XSA1B-*

Overview

Cellular Multiband Dipole Adhesive Puck, Flying Lead

Applications

LTE-M (Cat-M1), NB-IoT, UMTS, GSM, LPWA

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
880-960	2.7	1.6	34
1710-1880	2.6	1.0	28

Polarization	Linear
Wavelength	½-λ
Electrical Type	Dipole
Radiation Pattern	Omni directional
Impedance (Ohms)	50

Mechanical Data

Mounting Type	Adhesive Mount
Termination	SMA Plug
Dimensions	9.8x⌀50 mm
Op. Temp.	-30˚C to +70˚C
Cable Type	RG174
Cable Length*	1000 mm 2000 mm

Cellular

Remote

Magnetic Mount

MEYAF-129XSA1B-*

Overview

4G Cellular Multi-band Straight Monopole Magnetic Mount Whip, Flying Lead

Applications

4G LTE, UMTS, GSM, LTE-M (Cat-M1), NB-IoT, LPWA

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
698-960	2.5	2.0	55
1710-2690	2.0	3.0	63

Polarization	Linear
Wavelength	¼-λ
Electrical Type	Monopole
Radiation Pattern	Omni directional
Impedance (Ohms)	50

Mechanical Data

Mounting Type	Magnetic Mount
Termination	SMA Plug
Dimensions	91x⌀31 mm
Op. Temp.	-30˚C to +70˚C
Cable Type	RG174
Cable Length*	1000 mm 2000 mm

MECAF-126XSAXB-*

Overview

Cellular Multiband Straight Monopole Magnetic Mount Whip, Flying Lead

Applications

UMTS, GSM, LTE-M (Cat-M1), NB-IoT, LPWA

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
824-896	2.5	2.0	56
1710-2170	2.0	3.0	65

Polarization	Linear
Wavelength	¼-λ
Electrical Type	Monopole
Radiation Pattern	Omni directional
Impedance (Ohms)	50

Mechanical Data

Mounting Type	Magnetic Mount
Termination	SMA Plug
Dimensions	120x⌀27 mm
Op. Temp.	-30˚C to +70˚C
Cable Type	RG174
Cable Length*	1000 mm 2000 mm

Sub-1 GHz LPWA and ISM Antennas

MAP Electronics sub-1 GHz antennas for LPWA (low power wide area) and ISM applications offer single-band op-tions in multiple styles, mounting, and terminations at 433MHz, 490MHz, 868MHz and 915MHz in support of applications including:

- LoRaWAN®
- Sigfox®
- Weightless-P™
- WiFi HaLow™

Internal

Adhesive Mount

MEGRF-V090MP3B-*

New

Overview

868 & 915 MHz LPWA & ISM Ad-hesive Dipole PCB Rigid Flat Patch with Coax Cable

Applications

LoRaWAN, Sigfox, Weightless-P, WiFi HaLow

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
868	1.5	1.4	42
915	1.7	2.5	53

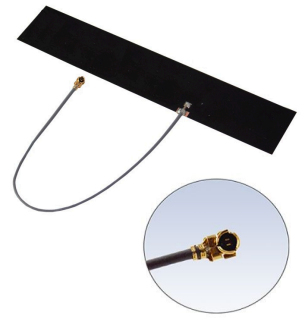
Polarization	Linear
Wavelength	½-λ
Electrical Type	Dipole
Radiation Pattern	Omni directional
Impedance (Ohms)	50

Mechanical Data

Mounting Type	Adhesive Mount
Termination*	U.FL/MHF Plug MHF4L Plug
Dimensions	90x18x1.1 mm
Op. Temp.	-40˚C to +85˚C
Cable Type	⌀1.13 mm
Cable Length*	60 mm 120 mm 180 mm

MEGRF-H100MP3B-*

New



Overview

868 & 915 MHz LPWA & ISM Ad-hesive Dipole PCB Rigid Flat Patch with Orthogonal Cable

Applications

LoRaWAN, Sigfox, Weightless-P, WiFi HaLow

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
868	1.6	2.0	62
915	1.6	3.6	72

Polarization	Linear
Wavelength	½-λ
Electrical Type	Dipole
Radiation Pattern	Omni directional
Impedance (Ohms)	50

Mechanical Data

Mounting Type	Adhesive Mount
Termination*	U.FL/MHF Plug MHF4L Plug
Dimensions	100x20x1.1 mm
Op. Temp.	-40˚C to +85˚C
Cable Type	⌀1.13 mm
Cable Length*	60 mm 120 mm 180 mm

Sub-1 GHz LPWA and ISM

External

Connector Mount

MEGHX-2120SA2W

New

Overview

915 MHz LPWA & ISM Monopole Straight Whip

Applications

LoRaWAN, Sigfox, Weightless-P, WiFi HaLow

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
915	2.5	2.0	62

Polarization	Linear
Wavelength	¼-λ
Electrical Type	Monopole
Radiation Pattern	Omni directional
Impedance (Ohms)	50

Mechanical Data

Mounting Type	Connector Mount
Termination*	SMA Plug RP-SMA Plug
Dimensions	22x⌀9 mm
Op. Temp.	-30˚C to +70˚C
Ground Plane	120 x 120 mm

MEGHX-2120SA1W

New

Overview

868 MHz LPWA & ISM Monopole Straight Whip

Applications

LoRaWAN, Sigfox, Weightless-P, WiFi HaLow

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
868	2.2	1.4	53

Polarization	Linear
Wavelength	¼-λ
Electrical Type	Monopole
Radiation Pattern	Omni directional
Impedance (Ohms)	50

Mechanical Data

Mounting Type	Connector Mount
Termination*	SMA Plug RP-SMA Plug
Dimensions	22x⌀9 mm
Op. Temp.	-30˚C to +70˚C
Ground Plane	120 x 120 mm

MEGHX-328XSA3B

Overview

868 & 915 MHz ISM & LPWA Straight Monopole Whip

Applications

LoRaWAN, Sigfox, Weightless-P, WiFi HaLow

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
868	1.6	2.7	78
915	1.7	2.7	79

Polarization	Linear
Wavelength	¼-λ
Electrical Type	Monopole
Radiation Pattern	Omni directional
Impedance (Ohms)	50

Mechanical Data

Mounting Type	Connector Mount
Termination*	SMA Plug RP-SMA Plug
Dimensions	46x⌀11 mm
Op. Temp.	-30˚C to +70˚C
Ground Plane	120 x 120mm

Sub-1 GHz LPWA and ISM

External

Connector Mount

MEGHX-463XSA3B

Overview

868 & 915 MHz
ISM & LPWA
Straight Monopole
Whip

Applications

LoRaWAN, Sigfox, Weightless-P, WiFi HaLow

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
868	1.3	1.0	60
915	1.7	2.4	72

Polarization	Linear
Wavelength	¼-λ
Electrical Type	Monopole
Radiation Pattern	Omni directional
Impedance (Ohms)	50

Mechanical Data

Mounting Type	Connector Mount
Termination*	SMA Plug RP-SMA Plug
Dimensions	176x⌀10 mm
Op. Temp.	-30˚C to +70˚C

MEGHX-150XNX3B

New

Overview

868 & 915 MHz
ISM & LPWA
Straight Dipole
Blade

Applications

LoRaWAN, Sigfox, Weightless-P, WiFi HaLow

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
868	2.5	1.9	56
915	2.0	2.5	61

Polarization	Linear
Wavelength	½-λ
Electrical Type	Dipole
Radiation Pattern	Omni directional
Impedance (Ohms)	50

Mechanical Data

Mounting Type	Connector Mount
Termination*	N-Type Plug N-Type Jack
Dimensions	178x⌀21 mm
Op. Temp.	-40˚C to +85˚C
IP Rating	IP67

MEGHX-325ASA3W

New

Overview

868 & 915 MHz
ISM & LPWA
Straight Monopole
Whip

Applications

LoRaWAN, Sigfox, Weightless-P, WiFi HaLow

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
868	1.8	2.4	65
915	1.7	4.2	71

Polarization	Linear
Wavelength	¼-λ
Electrical Type	Monopole
Radiation Pattern	Omni directional
Impedance (Ohms)	50

Mechanical Data

Mounting Type	Connector Mount
Termination*	SMA Plug RP-SMA Plug
Dimensions	105x⌀13.5 mm
Op. Temp.	-30˚C to +70˚C
Ground Plane	120 x 120 mm

Sub-1 GHz LPWA and ISM

External

Connector Mount

MEGWX-180ASA2B

Overview

915 MHz LPWA & ISM Tilt/Swivel Dipole Whip

Applications

LoRaWAN, Sigfox, Weightless-P, WiFi HaLow

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
915	1.6	2.8	74

Polarization	Linear
Wavelength	½-λ
Electrical Type	Dipole
Radiation Pattern	Omni directional
Impedance (Ohms)	50

Mechanical Data

Mounting Type	Connector Mount
Termination*	SMA Plug RP-SMA Plug
Dimensions	203x⌀13 mm
Op. Temp.	-30˚C to +70˚C
IP Rating	IP67

MEGWX-180ASA1B

Overview

868 MHz LPWA & ISM Tilt/Swivel Dipole Whip

Applications

LoRaWAN, Sigfox, Weightless-P, WiFi HaLow

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
868	1.5	2.0	73

Polarization	Linear
Wavelength	½-λ
Electrical Type	Dipole
Radiation Pattern	Omni directional
Impedance (Ohms)	50

Mechanical Data

Mounting Type	Connector Mount
Termination*	SMA Plug RP-SMA Plug
Dimensions	203x⌀13 mm
Op. Temp.	-30˚C to +70˚C
IP Rating	IP67

MEGWX-100ASA3B

Overview

868 & 915 MHz ISM & LPWA Tilt/Swivel Monopole Whip

Applications

LoRaWAN, Sigfox, Weightless-P, WiFi HaLow

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
868	1.8	2.3	72
915	1.9	2.2	73

Polarization	Linear
Wavelength	¼-λ
Electrical Type	Monopole
Radiation Pattern	Omni directional
Impedance (Ohms)	50

Mechanical Data

Mounting Type	Connector Mount
Termination*	SMA Plug RP-SMA Plug
Dimensions	124x⌀13 mm
Op. Temp.	-30˚C to +70˚C
Ground Plane	120 x 120 mm
IP Rating	IP67

MEGWX-241BSA3B

Overview

868 & 915 MHz ISM & LPWA Tilt/Swivel Monopole Whip

Applications

LoRaWAN, Sigfox, Weightless-P, WiFi HaLow

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
868	1.6	2.3	78
915	1.7	2.3	78

Polarization	Linear
Wavelength	¼-λ
Electrical Type	Monopole
Radiation Pattern	Omni directional
Impedance (Ohms)	50

Mechanical Data

Mounting Type	Connector Mount
Termination*	SMA Plug RP-SMA Plug
Dimensions	108x⌀10 mm
Op. Temp.	-30˚C to +70˚C
Ground Plane	120 x 120 mm

Sub-1 GHz LPWA and ISM

External

Connector Mount

MEGWX-715BSA3B

Overview

868 & 915MHz ISM & LPWA Tilt/ Swivel Dipole Blade

Applications

LoRaWAN, Sigfox, Weightless-P, WiFi HaLow

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
868	2.2	2.0	61
915	2.0	2.5	65

Polarization	Linear
Wavelength	½-λ
Electrical Type	Dipole
Radiation Pattern	Omni directional
Impedance (Ohms)	50

Mechanical Data

Mounting Type	Connector Mount
Termination	SMA Plug
Dimensions	183x28x13 mm
Op. Temp.	-30˚C to +70˚C

MEGWX-711BSA3B

Overview

868 & 915 MHz ISM & LPWA Tilt/ Swivel Dipole Blade

Applications

LoRaWAN, Sigfox, Weightless-P, WiFi HaLow

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
868	1.5	2.0	61
915	1.3	2.1	60

Polarization	Linear
Wavelength	½-λ
Electrical Type	Dipole
Radiation Pattern	Omni directional
Impedance (Ohms)	50

Mechanical Data

Mounting Type	Connector Mount
Termination	SMA Plug
Dimensions	136x24x11 mm
Op. Temp.	-30˚C to +70˚C

MEGWX-6231SA3B

Overview

868 & 915 MHz ISM & LPWA Tilt/ Swivel Dipole Blade

Applications

LoRaWAN, Sigfox, Weightless-P, WiFi HaLow

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
868	2.0	2.1	61
915	2.0	2.5	65

Polarization	Linear
Wavelength	½-λ
Electrical Type	Dipole
Radiation Pattern	Omni directional
Impedance (Ohms)	50

Mechanical Data

Mounting Type	Connector Mount
Termination	SMA Plug
Dimensions	205x25x13 mm
Op. Temp.	-30˚C to +70˚C

MEGWX-6141SA3B

Overview

868 & 915 MHz ISM & LPWA Tilt/ Swivel Dipole Blade

Applications

LoRaWAN, Sigfox, Weightless-P, WiFi HaLow

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
868	1.5	0.8	41
915	1.9	1.7	40

Polarization	Linear
Wavelength	½-λ
Electrical Type	Dipole
Radiation Pattern	Omni directional
Impedance (Ohms)	50

Mechanical Data

Mounting Type	Connector Mount
Termination	SMA Plug
Dimensions	160x22x13 mm
Op. Temp.	-30˚C to +70˚C

Sub-1 GHz LPWA and ISM

External

Connector Mount

MEGMX-221ASA3B

Overview

868 & 915 MHz ISM & LPWA Right Angle Monopole Whip

Applications

LoRaWAN, Sigfox, Weightless-P, WiFi HaLow

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
868	2.4	1.1	55
915	2.0	1.8	66

Polarization	Linear
Wavelength	¼-λ
Electrical Type	Monopole
Radiation Pattern	Omni directional
Impedance (Ohms)	50

Mechanical Data

Mounting Type	Connector Mount
Termination*	SMA Plug RP-SMA Plug
Dimensions	47x⌀8 mm
Op. Temp.	-30˚C to +70˚C
Ground Plane	120 x 120mm

MEUHX-325ASAXB

New

Overview

433 MHz ISM & 450 MHz Mono-pole Straight Whip

Applications

LoRaWAN, Weightless-P, Remote Control

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
433-450	2.0	2.1	46

Polarization	Linear
Wavelength	¼-λ
Electrical Type	Monopole
Radiation Pattern	Omni directional
Impedance (Ohms)	50

Mechanical Data

Mounting Type	Connector Mount
Termination	SMA Plug
Dimensions	105x⌀13.5 mm
Op. Temp.	-30˚C to +70˚C
Ground Plane	120 x 120mm

Sub-1 GHz LPWA and ISM

External

Connector Mount

MEGGX-1023NF3W

Overview

868 & 915MHz ISM & LPWA Outdoor Fiberglass Dipole Baton/Stick

Applications

LoRaWAN, Sigfox, Weightless-P, WiFi HaLow

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
868	1.6	0.3	48
915	1.3	1.5	57

Polarization	Linear
Wavelength	½-λ
Electrical Type	Dipole
Radiation Pattern	Omni directional
Impedance (Ohms)	50

Mechanical Data

Mounting Type	Connector Mount
Termination*	N-Type Jack N-Type Plug
Dimensions	145x⌀25 mm
Op. Temp.	-40˚C to +85˚C
IP Rating	IP67

MEGGX-1123NX3W

Overview

868 & 915 MHz ISM & LPWA Outdoor Fiberglass Dipole Baton/Stick

Applications

LoRaWAN, Sigfox, Weightless-P, WiFi HaLow

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
868	1.8	1.6	49
915	1.5	1.2	56

Polarization	Linear
Wavelength	½-λ
Electrical Type	Dipole
Radiation Pattern	Omni directional
Impedance (Ohms)	50

Mechanical Data

Mounting Type	Connector Mount
Termination	N-Type Plug
Dimensions	152x⌀24 mm
Op. Temp.	-40˚C to +85˚C
IP Rating	IP67

Sub-1 GHz LPWA and ISM

External

Connector Mount

MEGHX-1017NX2W

Overview

915 MHz ISM & LPWA Outdoor Fiberglass Dipole Baton/Stick

Applications

LoRaWAN, Sigfox, Weightless-P, WiFi HaLow

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
915	1.3	4.5	76

Polarization	Linear
Wavelength	½-λ
Electrical Type	Dipole
Radiation Pattern	Omni directional
Impedance (Ohms)	50

Mechanical Data

Mounting Type	Connector Mount
Termination	N-Type Plug
Dimensions	528x⌀20 mm
Op. Temp.	-40˚C to +85˚C
IP Rating	IP67

MEGGX-1017NX1W

Overview

868 MHz ISM & LPWA Outdoor Fiberglass Dipole Baton/Stick

Applications

LoRaWAN, Sigfox, Weightless-P, WiFi HaLow

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
868	1.7	4.4	71

Polarization	Linear
Wavelength	½-λ
Electrical Type	Dipole
Radiation Pattern	Omni directional
Impedance (Ohms)	50

Mechanical Data

Mounting Type	Connector Mount
Termination	N-Type Plug
Dimensions	528x⌀20 mm
Op. Temp.	-40˚C to +85˚C
IP Rating	IP67

MEGGX-103XNF2W

Overview

915 MHz ISM & LPWA Outdoor Fiberglass Dipole Baton/Stick

Applications

LoRaWAN, Sigfox, Weightless-P, WiFi HaLow

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
915	1.5	7.0	83

Polarization	Linear
Wavelength	½-λ
Electrical Type	Dipole
Radiation Pattern	Omni directional
Impedance (Ohms)	50

Mechanical Data

Mounting Type	Connector Mount
Termination	N-Type Jack
Dimensions	621x⌀22 mm
Op. Temp.	-40˚C to +85˚C
IP Rating	IP65

Sub-1 GHz LPWA and ISM

External

Panel Mount

MEGHX-3802NF3B

Overview

868 & 915 MHz ISM & LPWA Di-pole Dome/ Saltshaker

Applications

LoRaWAN, Sigfox, Weightless-P, WiFi HaLow

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
868	3.0	2.3	61
915	3.0	2.5	63

Polarization	Linear
Wavelength	½-λ
Electrical Type	Dipole
Radiation Pattern	Omni directional
Impedance (Ohms)	50

Mechanical Data

Mounting Type	Panel Mount
Termination	N-Type Jack
Dimensions	77.7x⌀38 mm
Op. Temp.	-40˚C to +85˚C
IP Rating	IP67

MEGHX-3602NF3B

Overview

868 & 915 MHz ISM & LPWA Di-pole Dome/ Saltshaker

Applications

LoRaWAN, Sigfox, Weightless-P, WiFi HaLow

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
868	3.0	1.9	58
915	3.0	2.2	60

Polarization	Linear
Wavelength	½-λ
Electrical Type	Dipole
Radiation Pattern	Omni directional
Impedance (Ohms)	50

Mechanical Data

Mounting Type	Panel Mount
Termination	N-Type Jack
Dimensions	71x⌀40.2 mm
Op. Temp.	-30˚C to +70˚C
IP Rating	IP65

Sub-1 GHz LPWA and ISM

External

Panel Mount

MEGHF-3802SA3B-*

Overview

868MHz 915MHz ISM & LPWA Di-pole Dome/ Saltshaker, Flying Lead

Applications

LoRaWAN, Sigfox, Weightless-P, WiFi HaLow

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
868	3.0	2.3	61
915	3.0	2.5	63

Polarization	Linear
Wavelength	½-λ
Electrical Type	Dipole
Radiation Pattern	Omni directional
Impedance (Ohms)	50

Mechanical Data

Mounting Type	Panel Mount
Termination	SMA Plug
Dimensions	78x⌀40 mm
Op. Temp.	-40˚C to +85˚C
Cable Type	RG174
Cable Length*	1000 mm
	2000 mm
IP Rating	IP65

MEGHF-3602SA3B-*

Overview

868MHz 915MHz ISM & LPWA Di-pole Dome/ Saltshaker, Flying Lead

Applications

LoRaWAN, Sigfox, Weightless-P, WiFi HaLow

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
868	3.0	1.9	58
915	3.0	2.2	60

Polarization	Linear
Wavelength	½-λ
Electrical Type	Dipole
Radiation Pattern	Omni directional
Impedance (Ohms)	50

Mechanical Data

Mounting Type	Panel Mount
Termination	SMA Plug
Dimensions	71x⌀40.2 mm
Op. Temp.	-30˚C to +70˚C
Cable Type	RG174
Cable Length*	1000 mm
	2000 mm

Sub-1 GHz LPWA and ISM

Remote

Adhesive Mount

MEGAF-603XSA3B-*

Overview

868 & 915 MHz ISM & LPWA Straight Dipole Adhesive Bar/ Blade, Flying Lead

Applications

LoRaWAN, Sigfox, Weightless-P, WiFi HaLow

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
868	2.0	2.0	47
915	1.8	2.3	50

Polarization	Linear
Wavelength	½-λ
Electrical Type	Dipole
Radiation Pattern	Omni directional
Impedance (Ohms)	50

Mechanical Data

Mounting Type	Adhesive Mount
Termination	SMA Plug
Dimensions	110x20x6 mm
Op. Temp.	-30˚C to +70˚C
Cable Type	RG174
Cable Length*	1000 mm 2000 mm

MEGAF-601XSA3B-*

Overview

868 & 915 MHz ISM & LPWA Straight Dipole Adhesive Bar/ Blade, Flying Lead

Applications

LoRaWAN, Sigfox, Weightless-P, WiFi HaLow

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
868	2.0	1.1	50
915	1.8	1.5	52

Polarization	Linear
Wavelength	½-λ
Electrical Type	Dipole
Radiation Pattern	Omni directional
Impedance (Ohms)	50

Mechanical Data

Mounting Type	Adhesive Mount
Termination	SMA Plug
Dimensions	146x20x13 mm
Op. Temp.	-30˚C to +70˚C
Cable Type	RG174
Cable Length*	1000 mm 2000 mm

MEGAF-350XSA3B-*

Overview

868 & 915 MHz ISM & LPWA Di-pole Adhesive Puck, Flying Lead

Applications

LoRaWAN, Sigfox, Weightless-P, WiFi HaLow

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
868	2.6	1.5	34
915	2.5	1.8	36

Polarization	Linear
Wavelength	½-λ
Electrical Type	Dipole
Radiation Pattern	Omni directional
Impedance (Ohms)	50

Mechanical Data

Mounting Type	Adhesive Mount
Termination	SMA Plug
Dimensions	9.8x⌀50 mm
Op. Temp.	-30˚C to +70˚C
Cable Type	RG174
Cable Length*	1000 mm 2000 mm

Sub-1 GHz LPWA and ISM

Remote

Magnetic Mount

MEGAF-129XSA3B-*

Overview

868 & 915 MHz
ISM & LPWA
Straight Monopole
Magnetic Mount
Whip, Flying Lead

Applications

LoRaWAN, Sigfox, Weightless-P, WiFi HaLow

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
868	2.5	1.8	55
915	2.2	2.0	58

Polarization	Linear
Wavelength	¼-λ
Electrical Type	Monopole
Radiation Pattern	Omni directional
Impedance (Ohms)	50

Mechanical Data

Mounting Type	Magnetic Mount
Termination	SMA Plug
Dimensions	91x⌀31 mm
Op. Temp.	-30˚C to +70˚C
Cable Type	RG174
Cable Length*	1000 mm 2000 mm

MEGAF-126XSA3B-*

Overview

868 & 915 MHz
ISM & LPWA
Straight Monopole
Magnetic Mount
Whip, Flying Lead

Applications

LoRaWAN, Sigfox, Weightless-P, WiFi HaLow

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
868	2.4	1.9	57
915	2.0	2.2	59

Polarization	Linear
Wavelength	¼-λ
Electrical Type	Monopole
Radiation Pattern	Omni directional
Impedance (Ohms)	50

Mechanical Data

Mounting Type	Magnetic Mount
Termination	SMA Plug
Dimensions	120x⌀27 mm
Op. Temp.	-30˚C to +70˚C
Cable Type	RG174
Cable Length*	1000 mm 2000 mm

Sub-1 GHz LPWA and ISM

Remote

Bracket Mount

MEGPX-026XNF2W

Overview

915 MHz Outdoor Directional Patch Flat Panel

Applications

RFID, LoRaWAN, Sigfox, Weightless-P, WiFi HaLow

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
915	1.1	8.1	79

Polarization	RHCP
Wavelength	½-λ
Electrical Type	Radiating Patch
Radiation Pattern	Directional
Impedance (Ohms)	50

Mechanical Data

Mounting Type	Bracket Mount
Termination	N-Type Jack
Dimensions	260x260x44 mm
Op. Temp.	-40˚C to +85˚C
IP Rating	IP65

MEGPX-036XNF2W

Overview

915 MHz Outdoor Directional Patch Flat Panel

Applications

RFID, LoRaWAN, Sigfox, Weightless-P, WiFi HaLow

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
915	1.2	8.9	83

Polarization	RHCP
Wavelength	½-λ
Electrical Type	Radiating Patch
Radiation Pattern	Directional
Impedance (Ohms)	50

Mechanical Data

Mounting Type	Bracket Mount
Termination	N-Type Jack
Dimensions	360x220x42 mm
Op. Temp.	-40˚C to +85˚C
IP Rating	IP65

MEGPX-052XNF2W

Overview

915 MHz Outdoor Directional Patch Flat Panel

Applications

RFID, LoRaWAN, Sigfox, Weightless-P, WiFi HaLow

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
915	1.2	9.5	84

Polarization	RHCP
Wavelength	½-λ
Electrical Type	Radiating Patch
Radiation Pattern	Directional
Impedance (Ohms)	50

Mechanical Data

Mounting Type	Bracket Mount
Termination	N-Type Jack
Dimensions	520x300x52 mm
Op. Temp.	-30˚C to +70˚C
IP Rating	IP65

MEGPX-052ANF2W

Overview

915 MHz Outdoor Directional Patch Flat Panel

Applications

RFID LoRaWAN, Sigfox, Weightless-P, WiFi HaLow

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
915	1.2	9.5	84

Polarization	RHCP
Wavelength	½-λ
Electrical Type	Radiating Patch
Radiation Pattern	Directional
Impedance (Ohms)	50

Mechanical Data

Mounting Type	Bracket Mount
Termination	N-Type Jack
Dimensions	521x301x48 mm
Op. Temp.	-40˚C to +85˚C
IP Rating	IP65

WiFi / WLAN

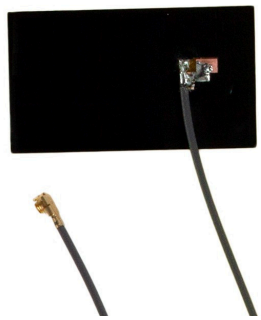
MAP Electronics multi-band 2.4 GHz, 5 GHz and 6 GHz antenna solutions target wireless LAN (WiFi/ WLAN) applica-tions including:

- WiFi 7 (Tri-band: 2.4 GHz + 5 GHz + 6 GHz)
- WiFi 6E (Tri-band: 2.4 GHz + 5 GHz + 6 GHz)
- WiFi 6 (Dual-band: 2.4 GHz + 5 GHz)
- WiFi 5 (5 GHz)
- WiFi 4 (2.4 GHz)
- U-NII 1-8
- 802.11b/g/n/ac/ax/be

Internal

Adhesive Mount

METBF-H035MP3B-*



Overview

WLAN/WiFi Trib- and Adhesive FPC Dipole Flexible Flat Patch Orthogonal Cable

Applications

WiFi 7, WiFi 6E, WiFi 6, WiFi 5, WiFi 4, U-NII, 802.11, 802.15.4

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
2400-2500	2.2	2.4	60
5150-5850	2.1	4.4	71
5925-7125	2.7	7.1	62

Polarization	Linear
Wavelength	½-λ
Electrical Type	Dipole
Radiation Pattern	Omni directional
Impedance (Ohms)	50

Mechanical Data

Mounting Type	Adhesive Mount
Termination*	U.FL-type Plug /MHF1 Plug MHF4 Plug
Dimensions	35x20x0.2 mm
Op. Temp.	-40˚C to +85˚C
Cable Type	ø1.13mm
Cable Length*	60 mm 120 mm 180 mm

METBF-V035MP3B-*

Overview

WLAN/WiFi Trib- and Adhesive FPC Dipole Flexible Flat Patch Coax Cable

Applications

WiFi 7, WiFi 6E, WiFi 6, WiFi 5, WiFi 4, U-NII, 802.11, 802.15.4

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
2400-2500	1.8	2.3	64
5150-5850	1.7	4.6	71
5925-7125	2.5	7.3	65

Polarization	Linear
Wavelength	½-λ
Electrical Type	Dipole
Radiation Pattern	Omni directional
Impedance (Ohms)	50

Mechanical Data

Mounting Type	Adhesive Mount
Termination*	U.FL-type Plug /MHF1 Plug MHF4 Plug
Dimensions	35x20x0.2 mm
Op. Temp.	-40˚C to +85˚C
Cable Type	ø1.13mm
Cable Length*	60 mm 120 mm 180 mm

METBF-H030MP3B-*

Overview

WLAN/WiFi Trib- and Adhesive FPC Dipole Flexible Flat Patch Orthogonal Cable

Applications

WiFi 7, WiFi 6E, WiFi 6, WiFi 5, WiFi 4, U-NII, 802.11, 802.15.4

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
2400-2500	2.0	2.3	63
5150-5850	1.5	4.6	70
5925-7125	1.5	6.3	64

Polarization	Linear
Wavelength	½-λ
Electrical Type	Dipole
Radiation Pattern	Omni directional
Impedance (Ohms)	50

Mechanical Data

Mounting Type	Adhesive Mount
Termination*	U.FL-type Plug /MHF1 Plug MHF4 Plug
Dimensions	30x10x0.2 mm
Op. Temp.	-40˚C to +85˚C
Cable Type	ø1.13mm
Cable Length*	60 mm 120 mm 180 mm

WiFi / WLAN

Internal

Adhesive Mount

METRF-H030MP3B-*

New

Overview

WLAN/WiFi Trib- and Adhesive PCB Dipole Rigid Flat Patch Orthogonal Cable

Applications

WiFi 7, WiFi 6E, WiFi 6, WiFi 5, WiFi 4, U-NII, 802.11, 802.15.4

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
2400-2500	1.7	2.5	60
5150-5850	1.3	4.7	64
5925-7125	2.3	4.8	50

Polarization	Linear
Wavelength	½-λ
Electrical Type	Dipole
Radiation Pattern	Omni directional
Impedance (Ohms)	50

Mechanical Data

Mounting Type	Adhesive Mount
Termination*	U.FL-type Plug /MHF1 Plug MHF4L Plug
Dimensions	30x10x1.1 mm
Op. Temp.	-40˚C to +85˚C
Cable Type	⌀1.13mm
Cable Length*	60 mm 120 mm 180 mm

METRF-H035MP3B-*

New

Overview

WLAN/WiFi Trib- and Adhesive PCB Dipole Rigid Flat Patch Orthogonal Cable

Applications

WiFi 7, WiFi 6E, WiFi 6, WiFi 5, WiFi 4, U-NII, 802.11, 802.15.4

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
2400-2500	2.2	2.4	60
5150-5850	2.1	4.4	71
5925-7125	2.7	7.1	62

Polarization	Linear
Wavelength	½-λ
Electrical Type	Dipole
Radiation Pattern	Omni directional
Impedance (Ohms)	50

Mechanical Data

Mounting Type	Adhesive Mount
Termination*	U.FL-type Plug /MHF1 Plug MHF4L Plug
Dimensions	35x20x1.1 mm
Op. Temp.	-40˚C to +85˚C
Cable Type	⌀1.13mm
Cable Length*	60 mm 120 mm 180 mm

METRF-V035MP3B-*

New

Overview

WLAN/WiFi Trib- and Adhesive PCB Dipole Rigid Flat Patch Coax Cable

Applications

WiFi 7, WiFi 6E, WiFi 6, WiFi 5, WiFi 4, U-NII, 802.11, 802.15.4

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
2400-2500	1.8	2.3	64
5150-5850	1.7	4.6	71
5925-7125	2.5	7.3	65

Polarization	Linear
Wavelength	½-λ
Electrical Type	Dipole
Radiation Pattern	Omni directional
Impedance (Ohms)	50

Mechanical Data

Mounting Type	Adhesive Mount
Termination*	U.FL-type Plug /MHF1 Plug MHF4L Plug
Dimensions	35x20x1.1 mm
Op. Temp.	-40˚C to +85˚C
Cable Type	⌀1.13mm
Cable Length*	60 mm 120 mm 180 mm

WiFi / WLAN

External

Connector Mount

METWX-100ARS3B

Overview

Outdoor WLAN/ WiFi Triband Tilt/ Swivel Dipole Whip

Applications

WiFi 7, WiFi 6E, WiFi 6, WiFi 5, WiFi 4, U-NII, 802.11, 802.15.4

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
2400-2500	1.6	2.6	71
5150-5850	1.5	4.3	57
5925-7125	3.0	4.6	58

Polarization	Linear
Wavelength	½-λ
Electrical Type	Dipole
Radiation Pattern	Omni directional
Impedance (Ohms)	50

Mechanical Data

Mounting Type	Connector Mount
Termination	RP-SMA Plug
Dimensions	124x⌀13 mm
Op. Temp.	-30˚C to +70˚C
IP Rating	IP67

METWX-180ARS3B

Overview

Outdoor WLAN/ WiFi Triband Tilt/ Swivel Dipole Whip

Applications

WiFi 7, WiFi 6E, WiFi 6, WiFi 5, WiFi 4, U-NII, 802.11, 802.15.4

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
2400-2500	1.9	3.7	53
5150-5850	1.6	5.5	69
5925-7125	2.0	4.9	66

Polarization	Linear
Wavelength	½-λ
Electrical Type	Dipole
Radiation Pattern	Omni directional
Impedance (Ohms)	50

Mechanical Data

Mounting Type	Connector Mount
Termination	RP-SMA Plug
Dimensions	203x⌀13 mm
Op. Temp.	-30˚C to +70˚C
IP Rating	IP67

METWX-100BRS3B

Overview

WLAN/WiFi Trib-and Tilt/Swivel Dipole Whip

Applications

WiFi 7, WiFi 6E, WiFi 6, WiFi 5, WiFi 4, U-NII, 802.11, 802.15.4

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
2400-2500	1.6	2.6	71
5150-5850	1.5	4.3	57
5925-7125	3.0	4.4	58

Polarization	Linear
Wavelength	½-λ
Electrical Type	Dipole
Radiation Pattern	Omni directional
Impedance (Ohms)	50

Mechanical Data

Mounting Type	Connector Mount
Termination	RP-SMA Plug
Dimensions	124x⌀13 mm
Op. Temp.	-30˚C to +70˚C

METWX-180BRS3B

Overview

WLAN/WiFi Trib-and Tilt/Swivel Dipole Whip

Applications

WiFi 7, WiFi 6E, WiFi 6, WiFi 5, WiFi 4, U-NII, 802.11, 802.15.4

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
2400-2500	1.9	3.7	53
5150-5850	1.6	5.5	69
5925-7125	2.0	4.9	66

Polarization	Linear
Wavelength	½-λ
Electrical Type	Dipole
Radiation Pattern	Omni directional
Impedance (Ohms)	50

Mechanical Data

Mounting Type	Connector Mount
Termination	RP-SMA Plug
Dimensions	203x⌀13 mm
Op. Temp.	-30˚C to +70˚C

WiFi / WLAN

External

Connector Mount

METMX-221ARS3B

Overview

WLAN/WiFi Trib- and Right-Angle Monopole Whip

Applications

WiFi 7, WiFi 6E, WiFi 6, WiFi 5, WiFi 4, U-NII, 802.11, 802.15.4

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
2400-2500	1.5	1.1	49
5150-5850	2.5	3.0	62
5925-7125	3.0	3.5	61

Polarization	Linear
Wavelength	¼-λ
Electrical Type	Monopole
Radiation Pattern	Omni directional
Impedance (Ohms)	50

Mechanical Data

Mounting Type	Connector Mount
Termination	RP-SMA Plug
Dimensions	47x⌀8 mm
Op. Temp.	-30˚C to +70˚C

METWX-144XRS3B

Overview

WLAN/WiFi Trib- and Tilt/Swivel Dipole Whip

Applications

WiFi 7, WiFi 6E, WiFi 6, WiFi 5, WiFi 4, U-NII, 802.11, 802.15.4

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
2400-2500	1.3	2.5	70
5150-5850	1.6	4.2	56
5925-7125	2.1	4.4	57

Polarization	Linear
Wavelength	½-λ
Electrical Type	Dipole
Radiation Pattern	Omni directional
Impedance (Ohms)	50

Mechanical Data

Mounting Type	Connector Mount
Termination	RP-SMA Plug
Dimensions	138x⌀13 mm
Op. Temp.	-30˚C to +70˚C

METHX-325ARS3B

New

Overview

WLAN/WiFi Trib- and Dipole Straight Whip

Applications

WiFi 7, WiFi 6E, WiFi 6, WiFi 5, WiFi 4, U-NII, 802.11, 802.15.4

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
2400-2500	2.0	3.3	64
5150-5850	2.0	3.8	62
5925-7125	2.7	2.6	51

Polarization	Linear
Wavelength	½-λ
Electrical Type	Dipole
Radiation Pattern	Omni directional
Impedance (Ohms)	50

Mechanical Data

Mounting Type	Connector Mount
Termination	RP-SMA Plug
Dimensions	105x⌀13.5 mm
Op. Temp.	-30˚C to +70˚C

METHX-150XNX3B

New

Overview

WLAN/WiFi Trib- and Dipole Straight Blade

Applications

WiFi 7, WiFi 6E, WiFi 6, WiFi 5, WiFi 4, U-NII, 802.11, 802.15.4

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
2400-2500	2.0	4.0	70
5150-5850	2.0	5.5	77
5925-7125	2.0	4.8	68

Polarization	Linear
Wavelength	½-λ
Electrical Type	Dipole
Radiation Pattern	Omni directional
Impedance (Ohms)	50

Mechanical Data

Mounting Type	Connector Mount
Termination	RP-SMA Plug
Dimensions	178x⌀21 mm
Op. Temp.	-40˚C to +85˚C
IP Rating	IP67

WiFi / WLAN

External

Panel Mount

METWF-144XMP3B-*

Overview

WLAN/WiFi Trib-and Tilt/Swivel Dipole Whip Flying Lead

Applications

WiFi 7, WiFi 6E, WiFi 6, WiFi 5, WiFi 4, U-NII, 802.11, 802.15.4

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
2400-2500	1.8	2.0	52
5150-5850	2.0	3.8	70
5925-7125	2.5	3.8	72

Polarization	Linear
Wavelength	½-λ
Electrical Type	Dipole
Radiation Pattern	Omni directional
Impedance (Ohms)	50

Mechanical Data

Mounting Type	Panel Mount
Termination	MHF1 Plug
Dimensions	131x⌀13 mm
Op. Temp.	-30˚C to +70˚C
Cable Type	⌀1.37mm
Cable Length*	150mm

METWF-1511MP1B-*

Overview

WLAN/WiFi Dual-band Tilt/Swivel Dipole Whip Flying Lead

Applications

WiFi 6, WiFi 5, WiFi 4, U-NII, 802.11, 802.15.4

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
2400-2500	1.8	3.6	55
5150-5850	2.0	5.0	70

Polarization	Linear
Wavelength	½-λ
Electrical Type	Dipole
Radiation Pattern	Omni directional
Impedance (Ohms)	50

Mechanical Data

Mounting Type	Panel Mount
Termination	MHF1 Plug
Dimensions	191x⌀13 mm
Op. Temp.	-30˚C to +70˚C
Cable Type	⌀1.37mm
Cable Length*	150mm

WiFi / WLAN

External

Connector Mount

METWX-282BRS3B

Overview

WLAN/WiFi Tri-band Tilt/Swivel Dipole Whip

Applications

WiFi 7, WiFi 6E, WiFi 6, WiFi 5, WiFi 4, U-NII, 802.11, 802.15.4

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
2400-2500	1.4	2.0	67
5150-5850	1.5	3.0	73
5925-7125	2.7	3.3	70

Polarization	Linear
Wavelength	½-λ
Electrical Type	Dipole
Radiation Pattern	Omni directional
Impedance (Ohms)	50

Mechanical Data

Mounting Type	Connector Mount
Termination	RP-SMA Plug
Dimensions	86x⌀10 mm
Op. Temp.	-30˚C to +70˚C

METWX-241BRS3B

Overview

WLAN/WiFi Tri-band Tilt/Swivel Dipole Whip

Applications

WiFi 7, WiFi 6E, WiFi 6, WiFi 5, WiFi 4, U-NII, 802.11, 802.15.4

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
2400-2500	1.3	2.1	65
5150-5850	1.4	3.1	69
5925-7125	2.1	3.3	72

Polarization	Linear
Wavelength	½-λ
Electrical Type	Dipole
Radiation Pattern	Omni directional
Impedance (Ohms)	50

Mechanical Data

Mounting Type	Connector Mount
Termination	RP-SMA Plug
Dimensions	108x⌀10 mm
Op. Temp.	-30˚C to +70˚C

METHX-328XRS3B

Overview

WLAN/WiFi Trib-and Dipole Straight Whip

Applications

WiFi 7, WiFi 6E, WiFi 6, WiFi 5, WiFi 4, U-NII, 802.11, 802.15.4

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
2400-2500	1.8	2.0	52
5150-5850	1.8	2.9	73
5925-7125	2.1	3.5	55

Polarization	Linear
Wavelength	½-λ
Electrical Type	Dipole
Radiation Pattern	Omni directional
Impedance (Ohms)	50

Mechanical Data

Mounting Type	Connector Mount
Termination	RP-SMA Plug
Dimensions	46x⌀11 mm
Op. Temp.	-30˚C to +70˚C

WiFi / WLAN

External

Panel Mount

METWF-282BMP3B-*

Overview

WLAN/WiFi Tri-band Tilt/Swivel Dipole Whip, Flying Lead

Applications

WiFi 7, WiFi 6E, WiFi 6, WiFi 5, WiFi 4, U-NII, 802.11, 802.15.4

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
2400-2500	1.4	2.0	67
5150-5850	1.5	3.0	73
5925-7125	2.7	3.3	70

Polarization	Linear
Wavelength	½-λ
Electrical Type	Dipole
Radiation Pattern	Omni directional
Impedance (Ohms)	50

Mechanical Data

Mounting Type	Panel Mount
Termination	MHF1 Plug
Dimensions	82x⌀10 mm
Op. Temp.	-30˚C to +70˚C
Cable Type	⌀1.37mm
Cable Length*	150mm

METWF-241BMP3B-*

Overview

WLAN/WiFi Tri-band Tilt/Swivel Dipole Whip, Flying Lead

Applications

WiFi 7, WiFi 6E, WiFi 6, WiFi 5, WiFi 4, U-NII, 802.11, 802.15.4

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
2400-2500	1.3	2.1	65
5150-5850	1.4	3.1	69
5925-7125	2.1	3.3	72

Polarization	Linear
Wavelength	½-λ
Electrical Type	Dipole
Radiation Pattern	Omni directional
Impedance (Ohms)	50

Mechanical Data

Mounting Type	Panel Mount
Termination	MHF1 Plug
Dimensions	105x⌀10 mm
Op. Temp.	-30˚C to +70˚C
Cable Type	⌀1.37mm
Cable Length*	150mm

WiFi / WLAN

External

Connector Mount

METGX-1023NF3W

Overview

Outdoor WLAN/ WiFi tri-band Fiberglass Dipole Baton/Stick

Applications

WiFi 7, WiFi 6E, WiFi 6, WiFi 5, WiFi 4, U-NII, 802.11, 802.15.4

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
2400-2500	1.5	2.7	77
5150-5850	1.8	6.3	63
5925-7125	2.4	6.8	43

Polarization	Linear
Wavelength	½-λ
Electrical Type	Dipole
Radiation Pattern	Omni directional
Impedance (Ohms)	50

Mechanical Data

Mounting Type	Connector Mount
Termination*	N-Type Jack N-Type Plug
Dimensions	145x⌀25 mm
Op. Temp.	-40˚C to +85˚C
IP Rating	IP67

METGX-1123NX3W

Overview

Outdoor WLAN/ WiFi Tri-band Fiberglass Dipole Baton/Stick

Applications

WiFi 7, WiFi 6E, WiFi 6, WiFi 5, WiFi 4, U-NII, 802.11, 802.15.4

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
2400-2500	1.4	2.9	73
5150-5850	1.7	5.0	60
5925-7125	1.8	5.5	40

Polarization	Linear
Wavelength	½-λ
Electrical Type	Dipole
Radiation Pattern	Omni directional
Impedance (Ohms)	50

Mechanical Data

Mounting Type	Connector Mount
Termination	N-Type Plug
Dimensions	152x⌀24 mm
Op. Temp.	-40˚C to +85˚C
IP Rating	IP67

METGX-1017NX3W

Overview

Outdoor WLAN/ WiFi Tri-band Fiberglass Dipole Baton/Stick

Applications

WiFi 7, WiFi 6E, WiFi 6, WiFi 5, WiFi 4, U-NII, 802.11, 802.15.4

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
2400-2500	1.8	7.2	77
5150-5850	2.3	7.5	68
5925-7125	3.6	7.9	70

Polarization	Linear
Wavelength	½-λ
Electrical Type	Dipole
Radiation Pattern	Omni directional
Impedance (Ohms)	50

Mechanical Data

Mounting Type	Connector Mount
Termination	N-Type Jack
Dimensions	528x⌀20 mm
Op. Temp.	-40˚C to +85˚C
IP Rating	IP67

METGX-103XNF1W

Overview

Outdoor WLAN/ WiFi Dual-band Fiberglass Dipole Baton/Stick

Applications

WiFi 6, WiFi 5, WiFi 4, U-NII, 802.11, 802.15.4

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
2400-2500	2.5	7.0	68
5150-5850	3.0	9.0	75

Polarization	Linear
Wavelength	½-λ
Electrical Type	Dipole
Radiation Pattern	Omni directional
Impedance (Ohms)	50

Mechanical Data

Mounting Type	Connector Mount
Termination	N-Type Jack
Dimensions	621x⌀22 mm
Op. Temp.	-30˚C to +70˚C
IP Rating	IP65

WiFi / WLAN

External

Connector Mount

METWX-711BRS3B

Overview

WLAN/WiFi Trib-and Tilt/Swivel Dipole Blade

Applications

WiFi 7, WiFi 6E, WiFi 6, WiFi 5, WiFi 4, U-NII, 802.11, 802.15.4

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
2400-2500	1.7	3.0	72
5150-5850	1.8	5.3	62
5925-7125	2.0	6.2	64

Polarization	Linear
Wavelength	½-λ
Electrical Type	Dipole
Radiation Pattern	Omni directional
Impedance (Ohms)	50

Mechanical Data

Mounting Type	Connector Mount
Termination	RP-SMA Plug
Dimensions	136x24x11 mm
Op. Temp.	-30˚C to +70˚C

METWX-614XRS3B

Overview

WLAN/WiFi Dual-band Tilt/Swivel Dipole Blade

Applications

WiFi 6, WiFi 5, WiFi 4, U-NII, 802.11, 802.15.4

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
2400-2500	1.8	3.2	59
5150-5850	1.6	6.2	71
5925-7125	3.0	5.4	59

Polarization	Linear
Wavelength	½-λ
Electrical Type	Dipole
Radiation Pattern	Omni directional
Impedance (Ohms)	50

Mechanical Data

Mounting Type	Connector Mount
Termination	RP-SMA Plug
Dimensions	160x22x13 mm
Op. Temp.	-30˚C to +70˚C

METWX-6231RS2B

Overview

WLAN/WiFi Dual-band Tilt/Swivel Dipole Blade

Applications

WiFi 6, WiFi 5, WiFi 4, U-NII, 802.11, 802.15.4

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
2400-2500	2.0	4.0	70
5150-5850	2.0	5.5	77

Polarization	Linear
Wavelength	½-λ
Electrical Type	Dipole
Radiation Pattern	Omni directional
Impedance (Ohms)	50

Mechanical Data

Mounting Type	Connector Mount
Termination	RP-SMA Plug
Dimensions	205x25x13 mm
Op. Temp.	-30˚C to +70˚C

METWX-721XRS3B

Overview

WLAN/WiFi Trib-and Tilt/Swivel Dipole Blade

Applications

WiFi 7, WiFi 6E, WiFi 6, WiFi 5, WiFi 4, U-NII, 802.11, 802.15.4

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
2400-2500	1.4	2.4	57
5150-5850	1.9	3.8	63
5925-7125	1.6	5.0	69

Polarization	Linear
Wavelength	½-λ
Electrical Type	Dipole
Radiation Pattern	Omni directional
Impedance (Ohms)	50

Mechanical Data

Mounting Type	Connector Mount
Termination	RP-SMA Plug
Dimensions	150x22x11 mm
Op. Temp.	-20˚C to +70˚C

WiFi / WLAN

External

Panel Mount

METHX-3802NF3B

Overview

WLAN/WiFi Dual-band Dipole Dome/Saltshaker

Applications

WiFi 6, WiFi 5, WiFi 4, U-NII, 802.11, 802.15.4

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
2400-2500	2.2	2.4	48
5150-5850	2.8	2.6	63

Polarization	Linear
Wavelength	½-λ
Electrical Type	Dipole
Radiation Pattern	Omni directional
Impedance (Ohms)	50

Mechanical Data

Mounting Type	Panel Mount
Termination	N-Type Jack
Dimensions	77.7x⌀38 mm
Op. Temp.	-40˚C to +85˚C
IP Rating	IP67

METHX-3602NF3B

Overview

WLAN/WiFi Tri-band Dipole Dome/Saltshaker

Applications

WiFi 7, WiFi 6E, WiFi 6, WiFi 5, WiFi 4, U-NII, 802.11, 802.15.4

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
2400-2500	2.0	2.0	45
5150-5850	2.0	2.0	60
5925-7125	3.0	2.0	63

Polarization	Linear
Wavelength	½-λ
Electrical Type	Dipole
Radiation Pattern	Omni directional
Impedance (Ohms)	50

Mechanical Data

Mounting Type	Panel Mount
Termination	N-Type Jack
Dimensions	71x⌀40.2 mm
Op. Temp.	-30˚C to +70˚C
IP Rating	IP65

WiFi / WLAN

External

Panel Mount

METHF-3802RS3B-*

Overview

WLAN/WiFi Dual-band Dipole Dome/Saltshaker, Flying Lead

Applications

WiFi 6, WiFi 5, WiFi 4, U-NII, 802.11, 802.15.4

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
2400-2500	2.2	2.4	48
5150-5850	2.8	2.6	63

Polarization	Linear
Wavelength	½-λ
Electrical Type	Dipole
Radiation Pattern	Omni directional
Impedance (Ohms)	50

Mechanical Data

Mounting Type	Panel Mount
Termination	RP-SMA Plug
Dimensions	77.7x⌀38 mm
Op. Temp.	-40˚C to +85˚C
Cable Type	RG174
Cable Length*	1000 mm 2000 mm
IP Rating	IP67

METHF-3602RS3B-*

Overview

WLAN/WiFi Tri-band Dipole Dome/Saltshaker, Flying Lead

Applications

WiFi 7, WiFi 6E, WiFi 6, WiFi 5, WiFi 4, U-NII, 802.11, 802.15.4

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
2400-2500	2.0	2.0	45
5150-5850	2.0	2.0	60
5925-7125	3.0	2.0	63

Polarization	Linear
Wavelength	½-λ
Electrical Type	Dipole
Radiation Pattern	Omni directional
Impedance (Ohms)	50

Mechanical Data

Mounting Type	Panel Mount
Termination	RP-SMA Plug
Dimensions	71x⌀40.2 mm
Op. Temp.	-30˚C to +70˚C
Cable Type	RG174
Cable Length*	1000 mm 2000 mm
IP Rating	IP65

WiFi / WLAN

Remote

Adhesive Mount

METAF-603XRS1B-*

Overview

WLAN/WiFi Dual-band Dipole Adhesive Blade/Bar, Flying Lead

Applications

WiFi 6, WiFi 5, WiFi 4, U-NII, 802.11, 802.15.4

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
2400-2500	2.0	3.0	65
5150-5850	2.0	4.2	70

Polarization	Linear
Wavelength	½-λ
Electrical Type	Dipole
Radiation Pattern	Omni directional
Impedance (Ohms)	50

Mechanical Data

Mounting Type	Adhesive Mount
Termination	RP-SMA Plug
Dimensions	110x20x6 mm
Op. Temp.	-30˚C to +70˚C
Cable Type	RG174
Cable Length*	1000 mm 2000 mm

METAF-601XRS1B-*

Overview

WLAN/WiFi Dual-band Dipole Adhesive Blade/Bar, Flying Lead

Applications

WiFi 6, WiFi 5, WiFi 4, U-NII, 802.11, 802.15.4

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
2400-2500	2.0	2.0	66
5150-5850	2.0	3.0	73

Polarization	Linear
Wavelength	½-λ
Electrical Type	Dipole
Radiation Pattern	Omni directional
Impedance (Ohms)	50

Mechanical Data

Mounting Type	Adhesive Mount
Termination	RP-SMA Plug
Dimensions	146x20x13 mm
Op. Temp.	-30˚C to +70˚C
Cable Type	RG174
Cable Length*	1000 mm 2000 mm

METAF-350XRS1B-*

Overview

WLAN/WiFi Dual-band Dipole Adhesive Puck, Flying Lead

Applications

WiFi 6, WiFi 5, WiFi 4, U-NII, 802.11, 802.15.4

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
2400-2500	2.0	1.5	61
5150-5850	2.0	2.0	68

Polarization	Linear
Wavelength	½-λ
Electrical Type	Dipole
Radiation Pattern	Omni directional
Impedance (Ohms)	50

Mechanical Data

Mounting Type	Adhesive Mount
Termination	RP-SMA Plug
Dimensions	9.8x⌀50 mm
Op. Temp.	-30˚C to +70˚C
Cable Type	RG174
Cable Length*	1000 mm 2000 mm

2.4 GHz ISM Antennas

MAP Electronics 2.4 GHz single-band antennas provide a broad band range of styles, mounting, termination and level of performance to accommodate ISM applications including:

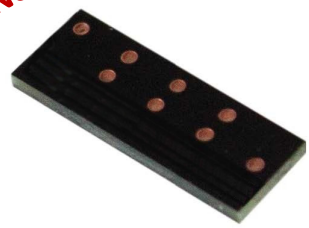
- BlueTooth®
- ZigBee®
- Thread®
- IEEE 802.11b/g
- IEEE 802.15.4

Internal

Surface Mount

MEIRD-C013SMDB

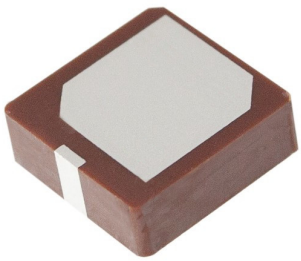
New



Overview	Electrical Data				Mechanical Data	
2.4 GHz ISM band Monopole PCB Chip SMD Type	Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)	Mounting Type	Surface Mount
	2400-2500	1.6	2.9	59	Termination	Solder Pad
					Dimensions	13x4.5x0.8 mm
					Op. Temp.	-40˚C to +85˚C
					Ground Plane	50 x 20 mm
Applications Bluetooth, Zigbee, Thread, 802.15.4, 802.11b/g						
	Polarization		Linear			
	Wavelength		¼-λ			
	Electrical Type		Monopole			
	Radiation Pattern		Omni directional			
	Impedance (Ohms)		50			

MEIPD-C012SMDB

New



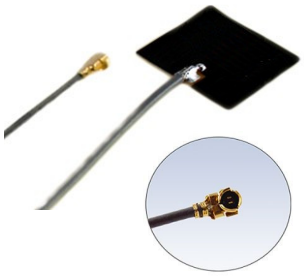
Overview	Electrical Data				Mechanical Data	
2.4 GHz ISM band Directional Ceram-ic Patch SMD Type	Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)	Mounting Type	Surface Mount
	2400-2500	3.1	5.6	62	Termination	Solder Pad
					Dimensions	12x12x4 mm
					Op. Temp.	-40˚C to +105˚C
					Ground Plane	60 x 60 mm
Applications Bluetooth, Zigbee, Thread, 802.15.4, 802.11b/g						
	Polarization		RHCP			
	Wavelength		½-λ			
	Electrical Type		Radiating Patch			
	Radiation Pattern		Directional			
	Impedance (Ohms)		50			

2.4 GHz ISM

Internal

Adhesive Mount

MEIBF-H015MPXB-*



Overview

2.4 GHz ISM Adhesive FPC Dipole Flexible Flat Patch with Orthogonal Cable

Applications

Bluetooth, Zigbee, Thread, 802.15.4, 802.11b/g

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
2400-2500	2.2	2.0	53

Polarization	Linear
Wavelength	½-λ
Electrical Type	Dipole
Radiation Pattern	Omni directional
Impedance (Ohms)	50

Mechanical Data

Mounting Type	Adhesive Mount
Termination*	U.FL-type Plug /MHF1 Plug MHF4L Plug
Dimensions	15x15x0.2 mm
Op. Temp.	-40˚C to +85˚C
Cable Type	⌀1.13mm
Cable Length*	60 mm 120 mm 180 mm

MEIBF-H040MPXB-*

Overview

2.4 GHz ISM Adhesive FPC Dipole Flexible Flat Patch with Orthogonal Cable

Applications

Bluetooth, Zigbee, Thread, 802.15.4, 802.11b/g

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
2400-2500	1.3	3.1	57

Polarization	Linear
Wavelength	½-λ
Electrical Type	Dipole
Radiation Pattern	Omni directional
Impedance (Ohms)	50

Mechanical Data

Mounting Type	Adhesive Mount
Termination*	U.FL-type Plug /MHF1 Plug MHF4L Plug
Dimensions	40x7x0.2 mm
Op. Temp.	-40˚C to +85˚C
Cable Type	⌀1.13mm
Cable Length*	60 mm 120 mm 180 mm

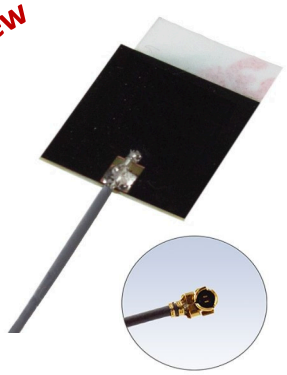
2.4 GHz ISM

Internal

Adhesive Mount

MEIRF-H015MPXB-*

New



Overview

2.4 GHz ISM Adhesive PCB Dipole Rigid Flat Patch with Orthogonal Cable

Applications

Bluetooth, Zigbee, Thread, 802.15.4, 802.11b/g

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
2400-2500	2.1	3.1	57

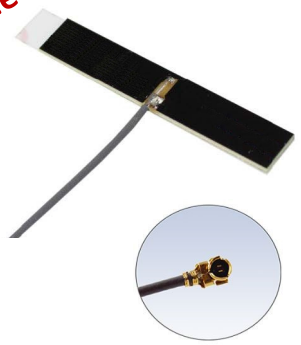
Polarization	Linear
Wavelength	½-λ
Electrical Type	Dipole
Radiation Pattern	Omni directional
Impedance (Ohms)	50

Mechanical Data

Mounting Type	Adhesive Mount
Termination*	U.FL-type Plug /MHF1 Plug MHF4L Plug
Dimensions	15x15x1.1 mm
Op. Temp.	-40˚C to +85˚C
Cable Type	⌀1.13mm
Cable Length*	60 mm
	120 mm
	180 mm

MEIRF-H040MPXB-*

New



Overview

2.4 GHz ISM Adhesive PCB Dipole Rigid Flat Patch with Orthogonal Cable

Applications

Bluetooth, Zigbee, Thread, 802.15.4, 802.11b/g

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
2400-2500	1.3	3.5	61

Polarization	Linear
Wavelength	½-λ
Electrical Type	Dipole
Radiation Pattern	Omni directional
Impedance (Ohms)	50

Mechanical Data

Mounting Type	Adhesive Mount
Termination*	U.FL-type Plug /MHF1 Plug MHF4L Plug
Dimensions	40x7x1.1 mm
Op. Temp.	-40˚C to +85˚C
Cable Type	⌀1.13mm
Cable Length*	60 mm
	120 mm
	180 mm

2.4 GHz ISM

External

Connector Mount

MEIHX-2120RSXW

New

Overview

2.4 GHz ISM
Straight Monopole
Whip

Applications

Bluetooth, Zigbee, Thread, 802.15.4, 802.11b/g

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
2400-2500	1.6	3.7	71

Polarization	Linear
Wavelength	¼-λ
Electrical Type	Monopole
Radiation Pattern	Omni directional
Impedance (Ohms)	50

Mechanical Data

Mounting Type	Connector Mount
Termination	RP-SMA Plug
Dimensions	22x⌀9 mm
Op. Temp.	-30˚C to +70˚C
Ground Plane	120 x 120 mm

MEIHX-325ARSXB

New

Overview

2.4 GHz ISM
Straight Monopole
Whip

Applications

Bluetooth, Zigbee, Thread, 802.15.4, 802.11b/g

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
2400-2500	2.0	2.6	65

Polarization	Linear
Wavelength	½-λ
Electrical Type	Dipole
Radiation Pattern	Omni directional
Impedance (Ohms)	50

Mechanical Data

Mounting Type	Connector Mount
Termination	RP-SMA Plug
Dimensions	105x⌀13.5 mm
Op. Temp.	-30˚C to +70˚C

MEIWX-282BRSXB

Overview

2.4 GHz ISM Tilt/ Swivel Dipole
Whip

Applications

Bluetooth, Zigbee, Thread, 802.15.4, 802.11b/g

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
2400-2500	1.6	2.4	72

Polarization	Linear
Wavelength	½-λ
Electrical Type	Dipole
Radiation Pattern	Omni directional
Impedance (Ohms)	50

Mechanical Data

Mounting Type	Connector Mount
Termination	RP-SMA Plug
Dimensions	86x⌀10 mm
Op. Temp.	-30˚C to +70˚C

MEIWX-241BRSXB

Overview

2.4 GHz ISM Tilt/ Swivel Dipole
Whip

Applications

Bluetooth, Zigbee, Thread, 802.15.4, 802.11b/g

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
2400-2500	1.5	2.5	67

Polarization	Linear
Wavelength	½-λ
Electrical Type	Dipole
Radiation Pattern	Omni directional
Impedance (Ohms)	50

Mechanical Data

Mounting Type	Connector Mount
Termination	RP-SMA Plug
Dimensions	108x⌀10 mm
Op. Temp.	-30˚C to +70˚C

2.4 GHz ISM

External

Panel Mount

MEIHF-2120MPXB-*

Overview

2.4 GHz ISM
Straight Monopole
Whip, Flying Lead

Applications

Bluetooth, Zigbee, Thread, 802.15.4, 802.11b/g

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
2400-2500	1.2	2.7	63

Polarization	Linear
Wavelength	¼-λ
Electrical Type	Monopole
Radiation Pattern	Omni directional
Impedance (Ohms)	50

Mechanical Data

Mounting Type	Panel Mount
Termination	MHF1 Plug
Dimensions	14x⌀9 mm
Op. Temp.	-30˚C to +70˚C
Cable Type	⌀1.13mm
Cable Length*	100 mm
	150 mm

MEIWF-282BMPXB-*

Overview

2.4 GHz ISM Tilt/ Swivel Dipole
Whip, Flying Lead

Applications

Bluetooth, Zigbee, Thread, 802.15.4, 802.11b/g

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
2400-2500	1.6	2.4	72

Polarization	Linear
Wavelength	½-λ
Electrical Type	Dipole
Radiation Pattern	Omni directional
Impedance (Ohms)	50

Mechanical Data

Mounting Type	Panel Mount
Termination	MHF1 Plug
Dimensions	82x⌀10 mm
Op. Temp.	-30˚C to +70˚C
Cable Type	⌀1.37mm
Cable Length*	150mm

MEIWF-241BMPXB-*

Overview

2.4 GHz ISM Tilt/ Swivel Dipole
Whip, Flying Lead

Applications

Bluetooth, Zigbee, Thread, 802.15.4, 802.11b/g

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
2400-2500	1.5	2.5	67

Polarization	Linear
Wavelength	½-λ
Electrical Type	Dipole
Radiation Pattern	Omni directional
Impedance (Ohms)	50

Mechanical Data

Mounting Type	Panel Mount
Termination	MHF1 Plug
Dimensions	105x⌀10 mm
Op. Temp.	-30˚C to +70˚C
Cable Type	⌀1.37mm
Cable Length*	150mm

2.4 GHz ISM

External

Connector Mount

MEIWX-180ARSXB

Overview

Outdoor 2.4 GHz ISM Tilt/Swivel Dipole Whip

Applications

Bluetooth, Zigbee, Thread, 802.15.4, 802.11b/g

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
2400-2500	1.9	4.5	77

Polarization	Linear
Wavelength	½-λ
Electrical Type	Dipole
Radiation Pattern	Omni directional
Impedance (Ohms)	50

Mechanical Data

Mounting Type	Connector Mount
Termination	RP-SMA Plug
Dimensions	203x⌀13 mm
Op. Temp.	-30˚C to +70˚C
IP Rating	IP67

MEIWX-100ARSXB

Overview

Outdoor 2.4 GHz ISM Tilt/Swivel Dipole Whip

Applications

Bluetooth, Zigbee, Thread, 802.15.4, 802.11b/g

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
2400-2500	1.7	3.0	65

Polarization	Linear
Wavelength	½-λ
Electrical Type	Dipole
Radiation Pattern	Omni directional
Impedance (Ohms)	50

Mechanical Data

Mounting Type	Connector Mount
Termination	RP-SMA Plug
Dimensions	124x⌀13 mm
Op. Temp.	-30˚C to +70˚C
IP Rating	IP67

MEIWX-180BRSXB

Overview

2.4 GHz ISM Tilt/ Swivel Dipole Whip

Applications

Bluetooth, Zigbee, Thread, 802.15.4, 802.11b/g

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
2400-2500	1.9	4.5	77

Polarization	Linear
Wavelength	½-λ
Electrical Type	Dipole
Radiation Pattern	Omni directional
Impedance (Ohms)	50

Mechanical Data

Mounting Type	Connector Mount
Termination	RP-SMA Plug
Dimensions	203x⌀13 mm
Op. Temp.	-30˚C to +70˚C

MEIWX-100BRSXB

Overview

2.4 GHz ISM Tilt/ Swivel Dipole Whip

Applications

Bluetooth, Zigbee, Thread, 802.15.4, 802.11b/g

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
2400-2500	1.7	3.0	65

Polarization	Linear
Wavelength	½-λ
Electrical Type	Dipole
Radiation Pattern	Omni directional
Impedance (Ohms)	50

Mechanical Data

Mounting Type	Connector Mount
Termination	RP-SMA Plug
Dimensions	124x⌀13 mm
Op. Temp.	-30˚C to +70˚C

2.4 GHz ISM

External

Connector Mount

MEIGX-1023NFXW

Overview

Outdoor 2.4 GHz ISM Fiberglass Dipole Baton/Stick

Applications

Bluetooth, Zigbee, Thread, 802.15.4, 802.11b/g

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
2400-2500	2.0	3.3	72

Polarization	Linear
Wavelength	½-λ
Electrical Type	Dipole
Radiation Pattern	Omni directional
Impedance (Ohms)	50

Mechanical Data

Mounting Type	Connector Mount
Termination*	N-Type Jack N-Type Plug
Dimensions	145x⌀25 mm
Op. Temp.	-40˚C to +85˚C
IP Rating	IP67

MEIGX-1123NXXW

Overview

Outdoor 2.4 GHz ISM Fiberglass Dipole Baton/Stick

Applications

Bluetooth, Zigbee, Thread, 802.15.4, 802.11b/g

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
2400-2500	2.0	3.5	76

Polarization	Linear
Wavelength	½-λ
Electrical Type	Dipole
Radiation Pattern	Omni directional
Impedance (Ohms)	50

Mechanical Data

Mounting Type	Connector Mount
Termination	N-Type Plug
Dimensions	152x⌀24 mm
Op. Temp.	-40˚C to +85˚C
IP Rating	IP67

GNSS Antennas

MAP Electronics offers internal and external Global Navigation Satellite System (GNSS) antennas for systems in-cluding:

- GPS (L1 band central frequency at: 1575.42MHz)
- Galileo (E1 band central frequency at: 1575.42MHz)
- Glonass (G1 band central frequency at: 1602MHz)
- BeiDou/ COMPASS (B1 band central frequency at: 1561MHz)

Data is provided by frequency band in MHz. GNSS frequency band names may be cross-referenced to frequencies using the band table on pages 64.

Internal

Surface Mount

MEPPD-C018GL1B

New

Overview

L1, E1, G1, B1C RHCP Ceramic Patch SMD Type

Applications

GNSS, Navigation, Location, Timing, GZSS

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
1575.46	1.7	3.6	65
1602	1.8	3.9	64

Polarization	RHCP
Wavelength	½-λ
Electrical Type	Radiating Patch
Radiation Pattern	Directional
Impedance (Ohms)	50

Mechanical Data

Mounting Type	Surface Mount
Termination	Solder Pad
Dimensions	18x18x4 mm
Op. Temp.	-40˚C to +105˚C
Ground Plane	60 x 60 mm

MEPCD-C020GL1W

New

Overview

L1, E1, G1, B1, B1C Monopole Ceram-ic Chip SMD Type

Applications

GNSS, Navigation, Location, Timing, GZSS

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
1561	1.6	1.1	57
1575.42	1.6	1.1	57
1602	1.9	1.2	53

Polarization	Linear
Wavelength	¼-λ
Electrical Type	Monopole
Radiation Pattern	Omni directional
Impedance (Ohms)	50

Mechanical Data

Mounting Type	Surface Mount
Termination	Solder Pad
Dimensions	20x3.5x2 mm
Op. Temp.	-40˚C to +105˚C
Ground Plane	60 x 60 mm

GNSS

Internal

Adhesive plus Through-hole Solder Mount

MEPPX-C025GL1W

New

Overview

L1, E1, G1, B1, B1C RHCP Ceramic Patch Through-hole Pin Type

Applications

GNSS, Navigation, Location, Timing, GZSS

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
1561	2.4	4.0	70
1575.42	2.2	3.2	63
1602	1.4	5.2	77

Polarization	RHCP
Wavelength	½-λ
Electrical Type	Radiating Patch
Radiation Pattern	Directional
Impedance (Ohms)	50

Mechanical Data

Mounting Type	Adhesive + TH Solder Mount
Termination	Solder Pad
Dimensions	25x25x4 mm
Op. Temp.	-40˚C to +105˚C
Ground Plane	60 x 60 mm

GNSS

Internal

Mechanical Mount

MEPLF-C025MP4B

New

Overview

L1, L2, L5 RHCP Stacked Ceramic Patch Active antenna with 1.13 coax cable and MHF plug connector

Applications

GNSS, Navigation, Location, Timing, GZSS

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Noise Figure (dB)
1176.45	1.5	28	1.3
1227.6	1.8	27	1.5
1561	5.0	26	1.3
1575.42	2.8	28	1.2
1602	2.2	29	1.2

Polarization	RHCP
Wavelength	½-λ
Electrical Type	Radiating Patch + LNA
Radiation Pattern	Directional
Impedance (Ohms)	50

Mechanical Data

Mounting Type	Mechanical Mount
Termination	MHF Plug
Dimensions	25x25x13 mm
Op. Temp.	-40˚C to +85˚C
Ground Plane	25 x 25 mm
Cable Type	⌀1.13 mm
Cable Length*	60 mm 120 mm

GNSS

External

Connector Mount

MEPWX-711BSAXB

Overview

L1, E1, G1, B1, B1C
Tilt/Swivel Dipole
Blade

Applications

GNSS, Navigation, Location, Timing, GZSS

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
1561	1.3	1.1	67
1575.42	1.2	1.5	71
1602	1.2	1.6	68

Polarization	Linear
Wavelength	½-λ
Electrical Type	Dipole
Radiation Pattern	Omni directional
Impedance (Ohms)	50

Mechanical Data

Mounting Type	Connector Mount
Termination	SMA Plug
Dimensions	136x24x11 mm
Op. Temp.	-40˚C to +85˚C

GNSS

External

Panel Mount

MEPPX-6030NFXB

Overview

L1, E1, G1 RHCP Active Dome with integrated 2-stage LNA

Applications

GNSS, Navigation, Location, Timing, GZSS

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Noise Figure (dB)
1561	1.2	28	1.2
1575.42	2.0	29	1.2
1602	1.9	29	1.3

Polarization	RHCP
Wavelength	½-λ
Electrical Type	Radiating Patch + LNA
Radiation Pattern	Directional
Impedance (Ohms)	50

Mechanical Data

Mounting Type	Panel Mount
Termination	N-Type Jack
Dimensions	30x⌀60 mm
Op. Temp.	-30˚C to +70˚C
IP Rating	IP65

MEPPF-6030SA4B-*

New

Overview

L1, L2, L5 RHCP Active Dome with integrated 2-stage LNA, Coax Cable

Applications

GNSS, Navigation, Location, Timing, GZSS

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Noise Figure (dB)
1176.45	1.5	33	1.8
1227.6	1.4	32	1.8
1561	1.2	29	1.6
1575.42	1.1	30	1.6
1602	1.5	32	1.6

Polarization	RHCP
Wavelength	½-λ
Electrical Type	Radiating Patch + LNA
Radiation Pattern	Directional
Impedance (Ohms)	50

Mechanical Data

Mounting Type	Panel Mount
Termination	SMA Plug
Dimensions	30x⌀60 mm
Op. Temp.	-30˚C to +70˚C
Cable Type	RG 174
Cable Length*	1000 mm 3000 mm
IP Rating	IP65

GNSS

Remote

Magnetic Mount

MEPPF-GP07SAXB-*

Overview

L1, E1, G1, B1, B1C RHCP Active Puck with integrated 2-stage LNA, Coax Cable

Applications

GNSS, Navigation, Location, Timing, GZSS

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Noise Figure (dB)
1561	1.8	30	0.9
1575.42	2.0	29	0.9
1602	1.7	29	0.9

Polarization	RHCP
Wavelength	½-λ
Electrical Type	Radiating Patch + LNA
Radiation Pattern	Directional
Impedance (Ohms)	50

Mechanical Data

Mounting Type	Magnetic Mount
Termination	SMA Plug
Dimensions	49x38x17 mm
Op. Temp.	-30˚C to +70˚C
Cable Type	RG 174
Cable Length*	1000 mm 3000 mm
IP Rating	IP65

MEPPF-GP04SA4B-*

New

Overview

L1, L2, L5 RHCP Active Puck with integrated 2-stage LNA, Coax Cable

Applications

GNSS, Navigation, Location, Timing, GZSS

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Axial Ratio (dB)
1176.45	1.6	33	1.8
1227.6	1.4	33	1.8
1561	1.2	30	1.6
1575.42	1.2	32	1.6
1602	1.3	32	1.6

Polarization	RHCP
Wavelength	½-λ
Electrical Type	Radiating Patch + LNA
Radiation Pattern	Directional
Impedance (Ohms)	50

Mechanical Data

Mounting Type	Magnetic Mount
Termination	SMA Plug
Dimensions	41x38x17 mm
Op. Temp.	-40˚C to +85˚C
Cable Type	RG 174
Cable Length*	1000 mm 3000 mm
IP Rating	IP65

Combo (MIMO) Antennas

MAP Electronics offers external Multi Input and Multi Output (MIMO) combo all-in-1 antennas for fleet manage-ment, public transportation, industrial and other applications combining:

- LTE / Cellular 5G, 4G, 3G, 2G
- WiFi / WLAN
- GNSS
- 2.4 GHz
- UHF / VHF
- ISM / LPWA

External

Panel Mount

MEPPF-095A3SQB-Q200

New

Overview

3x3 MIMO Puck WiFi x2, GNSS x1 with Coax Cable

Applications

Fleet Manage-ment, Public Transportation, Industrial

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
2400-2500	2.0	2.7	62
5150-5850	2.2	3.6	68
5925-7125	2.1	3.5	73
1561	1.5	30	
1575.42	1.3	30	
1602	1.5	32	
Polarization		Linear/RHCP (GNSS)	
Wavelength		¼-λ	
Electrical Type		Monopole	
Radiation Pattern		Omni directional	
Impedance (Ohms)		50	

Mechanical Data

Mounting Type	Panel Mount
Termination	SMA Plug
Dimensions	35x⌀95 mm
Op. Temp.	-40˚C to +85˚C
Cable Type	RG174/RG58
Cable Length*	1000 mm
	2000 mm
	3000 mm
IP Rating	IP67

MEPPF-165A5SNB-Q200

New

Overview

Outdoor MIMO 5x5 Dome 5G/LTE x2, WiFi x2, GNSS x1

Applications

Fleet Manage-ment, Public Transportation, Industrial

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
617-960	4.7	3.8	48
1710-2690	2.1	4.9	51
3300-4200	2.0	3.3	35
4400-5000	1.6	3.7	38
5150-5850	1.7	2.9	32
1575.42	1.7	30.0	
Polarization		Linear/RHCP (GNSS)	
Wavelength		¼-λ	
Electrical Type		Monopole	
Radiation Pattern		Omni directional	
Impedance (Ohms)		50	

Mechanical Data

Mounting Type	Panel Mount
Termination	SMA Plug
Dimensions	50x⌀141.3 mm
Op. Temp.	-40˚C to +85˚C
Cable Type	RG58/RG174
Cable Length*	2000 mm
	5000 mm
IP Rating	IP67

MEPPF-168A5SNB-*

Overview

Outdoor MIMO 5x5 Dome 5G/LTE x2, WiFi x2, GNSS x1

Applications

Fleet Manage-ment, Public Transportation, Industrial

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
617-960	2.5	3.8	66
1710-2690	2.0	4.0	69
3300-4200	2.0	4.7	62
4400-5000	2.2	4.6	68
5150-5925	2.1	5.5	73
1575.42	2.3	30.0	
Polarization		Linear/RHCP (GNSS)	
Wavelength		¼-λ	
Electrical Type		Monopole	
Radiation Pattern		Omni directional	
Impedance (Ohms)		50	

Mechanical Data

Mounting Type	Panel Mount
Termination	SMA Plug
Dimensions	85x⌀142 mm
Op. Temp.	-40˚C to +85˚C
Cable Type	RG174/RG58
Cable Length*	2000 mm
	3000 mm
IP Rating	IP67

Combo / MIMO

External

Panel Mount

MEPPF-1003SAXW-*

Overview

MIMO 5x5 Dome 4G/LTEx2, WiFi x2, GNSS x1

Applications

Fleet Management, Public Transportation, Industrial

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
698-960	2.8	3.5	42
1710-2690	2.5	4.0	68
2400-2500	2.8	3.4	64
5150-5850	2.5	5.7	61
1575.42	2.0	30.0	

Polarization	Linear/RHCP (GNSS)
Wavelength	½-λ
Electrical Type	Dipole
Radiation Pattern	Omni directional
Impedance (Ohms)	50

Mechanical Data

Mounting Type	Panel Mount
Termination	SMA Plug
Dimensions	75x⌀107 mm
Op. Temp.	-30˚C to +70˚C
Cable Type	RG174/RG58
Cable Length*	2000 mm 3000 mm
IP Rating	IP65

METDF-1204RS1W-*

Overview

MIMO 4x4 Dome WiFi x 4 Ceiling Mount DAS

Applications

WiFi 6, WiFi 5, WiFi 4, U-NII, 802.11, 802.15.4

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
2400-2500	2.5	2.5	65
5150-5850	2.5	4.3	72

Polarization	Linear
Wavelength	¼-λ
Electrical Type	Monopole
Radiation Pattern	Directional
Impedance (Ohms)	50

Mechanical Data

Mounting Type	Panel Mount
Termination	SMA Plug
Dimensions	45x⌀130 mm
Op. Temp.	-30˚C to +70˚C
Cable Type	RG174
Cable Length*	2000 mm 3000 mm

Other Antennas

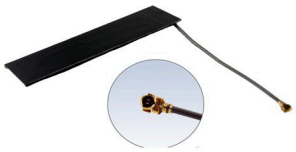
MAP Electronics offers a number of internal and external antennas for uses including Land Mobile Radio (VHF/UHF), Medical applications, unlicensed applications and remote control applications including:

- 13.56MHz (NFC)
- 169MHz
- 315MHz
- 430MHz
- 1.4GHz
- 3~10GHz (UWB)

Internal

Adhesive Mount

MELBF-A045MPXB-*



Overview

13.56 MHz Loop Rigid PCB with Ferrite Backing

Applications

NFC, RFID, Access control, POS terminal

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
13.56	2.0		

Polarization	Linear
Wavelength	Magnetic Field
Electrical Type	Loop
Radiation Pattern	Directional
Impedance (Ohms)	50

Mechanical Data

Mounting Type	Adhesive Mount
Termination*	U.FL-Type Plug /MHF1 Plug MHF4 Plug
Dimensions	45x14x2 mm
Op. Temp.	-40℃ to +85℃
Cable Type	⌀1.13 mm
Cable Length*	60 mm 120 mm 180 mm

Other

External

Connector Mount

MEUHX-465XSAXB

Overview

UHF 430 MHz
Straight Monopole
Whip

Applications
LMR for Public Safety

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
430	2.0	2.0	50

Polarization	Linear
Wavelength	¼-λ
Electrical Type	Monopole
Radiation Pattern	Omni directional
Impedance (Ohms)	50

Mechanical Data

Mounting Type	Connector Mount
Termination	SMA Plug
Dimensions	193x⌀14 mm
Op. Temp.	-30˚C to +70˚C

MEUHX-462CSAXB

Overview

UHF 400-420MHz
Straight Monopole
Whip

Applications
LMR for Public Safety

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
400-420	2.0	2.0	60

Polarization	Linear
Wavelength	¼-λ
Electrical Type	Monopole
Radiation Pattern	Omni directional
Impedance (Ohms)	50

Mechanical Data

Mounting Type	Connector Mount
Termination	SMA Plug
Dimensions	170x⌀14.8 mm
Op. Temp.	-30˚C to +70˚C

MEUHX-SH01SAXB

Overview

UHF 470-654MHz
Straight Monopole
Whip

Applications
LMR for Public Safety

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
470-654	2.5	2.5	50

Polarization	Linear
Wavelength	¼-λ
Electrical Type	Monopole
Radiation Pattern	Omni directional
Impedance (Ohms)	50

Mechanical Data

Mounting Type	Connector Mount
Termination	SMA Plug
Dimensions	133x⌀10 mm
Op. Temp.	-30˚C to +70˚C

Other

Remote

Magnetic Mount

MEUAF-121XSAXB-*

Overview

UHF 430 MHz
Straight Monopole
Magnetic Mount
Whip, Flying Lead

Applications
LMR for Public Safety

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
430	2.0	2.0	60

Polarization	Linear
Wavelength	¼-λ
Electrical Type	Monopole
Radiation Pattern	Omni directional
Impedance (Ohms)	50

Mechanical Data

Mounting Type	Magnetic Mount
Termination	SMA Plug
Dimensions	178x⌀27 mm
Op. Temp.	-30˚C to +70˚C
Cable Type	RG174
Cable Length*	1000 mm 2000 mm

MEUAF-128XSAXB-*

Overview

UHF 470-490MHz
Straight Monopole
Magnetic Mount
Whip, Flying Lead

Applications
LMR for Public Safety

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
470-490	2.5	2.0	60

Polarization	Linear
Wavelength	¼-λ
Electrical Type	Monopole
Radiation Pattern	Omni directional
Impedance (Ohms)	50

Mechanical Data

Mounting Type	Magnetic Mount
Termination	SMA Plug
Dimensions	120x⌀27 mm
Op. Temp.	-30˚C to +70˚C
Cable Type	RG174
Cable Length*	1000 mm 2000 mm

MEUAF-126XSAXB-*

Overview

UHF 430MHz
Straight Monopole
Magnetic Mount
Whip, Flying Lead

Applications
LMR for Public Safety

Electrical Data

Frequency (MHz)	VSWR (Max)	Peak Gain (dBi)	Efficiency (%)
430	2.0	0.3	47

Polarization	Linear
Wavelength	¼-λ
Electrical Type	Monopole
Radiation Pattern	Omni directional
Impedance (Ohms)	50

Mechanical Data

Mounting Type	Magnetic Mount
Termination	SMA Plug
Dimensions	120x⌀27 mm
Op. Temp.	-30˚C to +70˚C
Cable Type	RG174
Cable Length*	1000 mm 2000 mm

Cellular LTE / 5G NR Frequency Band Guide

Band #	Uplink Band (MHz)	Downlink Band (MHZ)	Overall Band (MHz)	Total Bandwidth	LTE-M	LTE NB-IoT	5G NB-IoT
(n)1	1920 — 1980	2110 — 2170	1920 — 2170	250	X	X	X
(n)2	1850 — 1910	1930 — 1990	1850 — 1990	140	X	X	X
(n)3	1710 — 1785	1805 — 1880	1710 — 1880	170	X	X	X
4	1710 — 1755	2110 — 2155	1710 — 2155	445	X	X	
(n)5	824 — 849	869 — 894	824 — 894	70	X	X	X
6	830 — 840	875 — 885	830 — 885	55			
(n)7	2500 — 2570	2620 — 2690	2500 — 2690	190	X	X	X
(n)8	880 — 915	925 — 960	880 — 960	80	X	X	X
9	1749.9 — 1784.9	1844.9 — 1879.9	1749.9 — 1879.9	130			
10	1710 — 1770	2110 — 2170	1710 — 2170	460			
11	1427.9 — 1447.9	1475.9 — 1495.9	1427.9 — 1495.9	68	X	X	
(n)12	699 — 716	729 — 746	699 — 746	47	X	X	X
(n)13	777 — 787	746 — 756	746 — 787	41	X	X	
(n)14	788 — 798	758 — 768	758 — 798	40	X	X	X
17	704 — 716	734 — 746	704 — 746	42		X	
(n)18	815 — 830	860 — 875	815 — 875	60	X	X	X
19	830 — 845	875 — 890	830 — 890	60	X	X	
(n)20	832 — 862	791 — 821	791 — 862	71	X	X	X
21	1447.9 — 1462.9	1495.9 — 1510.9	1447.9 — 1510.9	63	X	X	
22	3410 — 3490	3510 — 3590	3410 — 3590	180			
23	2000 — 2020	2180 — 2200	2000 — 2200	200			
(n)24	1626.5 — 1660.5	1525 — 1559	1525 — 1660.5	135.5	X	X	X
(n)25	1850 — 1915	1930 — 1995	1850 — 1995	145	X	X	X
(n)26	814 — 849	859 — 894	814 — 894	80	X	X	X
27	807 — 824	852 — 869	807 — 869	62	X		
(n)28	703 — 748	758 — 803	703 — 803	100	X	X	X
(n)29	N/A	717 — 728	717 — 728	11			
(n)30	2305 — 2315	2350 — 2360	2305 — 2360	55			
(n)31	452.5 — 457.5	462.5 — 467.5	452.5 — 467.5	15	X	X	X
32	N/A	1452 — 1496	1452 — 1496	44			
33	1900 — 1920	1900 — 1920	1900 — 1920	20			
(n)34	2010 — 2025	2010 — 2025	2010 — 2025	15			
35	1850 — 1910	1850 — 1910	1850 — 1910	60			
36	1930 — 1990	1930 — 1990	1930 — 1990	60			
37	1910 — 1930	1910 — 1930	1910 — 1930	20			
(n)38	2570 — 2620	2570 — 2620	2570 — 2620	50			
(n)39	1880 — 1920	1880 — 1920	1880 — 1920	40			
(n)40	2300 — 2400	2300 — 2400	2300 — 2400	100			
(n)41	2496 — 2690	2496 — 2690	2496 — 2690	194		X	X
42	3400 — 3600	3400 — 3600	3400 — 3600	200		X	
43	3600 — 3800	3600 — 3800	3600 — 3800	200		X	
44	703 — 803	703 — 803	703 — 803	100			
45	1447 — 1467	1447 — 1467	1447 — 1467	20			
(n)46	5150 — 5925	5150 — 5925	5150 — 5925	775			
47	5855 — 5925	5855 — 5925	5855 — 5925	70			

LTE: 3GGP TS 36.101 V18.6.0 (2024-06), 5G NR: 3GGP TS 38.104 V18.6.0 (2024-06)

Go Back to Cellular Antenna

Cellular LTE / 5G NR Frequency Band Guide

Band #	Uplink Band (MHz)	Downlink Band (MHZ)	Overall Band (MHz)	Total Bandwidth	LTE-M	LTE NB-IoT	5G NB-IoT
(n)48	3550 — 3700	3550 — 3700	3550 — 3700	150		X	
49	3550 — 3700	3550 — 3700	3550 — 3700	150			
(n)50	1432 — 1517	1432 — 1517	1432 — 1517	85			
(n)51	1427 — 1432	1427 — 1432	1427 — 1432	5			
52	3300 — 3400	3300 — 3400	3300 — 3400	100			
(n)53	2483.5 — 2495	2483.5 — 2495	2483.5 — 2495	11.5			
(n)54	1670 — 1675	1670 — 1675	1670 — 1675	5	X	X	X
(n)65	1920 — 2010	2110 — 2200	1920 — 2200	280		X	X
(n)66	1710 — 1780	2110 — 2200	1710 — 2200	490	X	X	X
(n)67	N/A	738 — 758	738 — 758	20			
68	698 — 728	753 — 783	698 — 783	85			
69	N/A	2570 — 2620	2570 — 2620	50			
(n)70	1695 — 1710	1995 — 2020	1695 — 2020	325		X	X
(n)71	663 — 698	617 — 652	617 — 698	81	X	X	X
(n)72	451 — 456	461 — 466	451 — 466	15	X	X	X
73	450 — 455	460 — 465	450 — 465	15	X	X	
(n)74	1427 — 1470	1475 — 1518	1427 — 1518	91	X	X	X
(n)75	N/A	1432 — 1517	1432 — 1517	85			
(n)76	N/A	1427 — 1432	1427 — 1432	5			
n77	3300 — 4200	3300 — 4200	3300 — 4200	900			
n78	3300 — 3800	3300 — 3800	3300 — 3800	500			
n79	4400 — 5000	4400 — 5000	4400 — 5000	600			
n80	1710 — 1785	N/A	1710 — 1785	75			
n81	880 — 915	N/A	880 — 915	35			
n82	832 — 862	N/A	832 — 862	30			
n83	703 — 748	N/A	703 — 748	45			
n84	1920 — 1980	N/A	1920 — 1980	60			
(n)85	698 — 716	728 — 746	698 — 746	48	X	X	
n86	1710 — 1780	N/A	1710 — 1780	70			
87	410 — 415	420 — 425	410 — 425	15	X	X	
88	412 — 417	422 — 427	412 — 427	15	X	X	
n89	824 — 849	N/A	824 — 849	25			
n90	2496 — 2690	2496 — 2690	2496 — 2690	194			X
n91	832 — 862	1427 — 1432	832 — 1432	600			
n92	832 — 862	1432 — 1517	832 — 1517	685			
n93	880 — 915	1427 — 1432	880 — 1432	552			
n94	880 — 915	1432 — 1517	880 — 1517	637			
n95	2010 — 2025	N/A	2010 — 2025	15			
n96	5925 — 7125	5925 — 7125	5925 — 7125	1200			
n97	2300 — 2400	N/A	2300 — 2400	100			
n98	1880 — 1920	N/A	1880 — 1920	40			
n99	1626.5 — 1660.5	N/A	1626.5 — 1660.5	34			
n100	874.4 — 880	919.4 — 925	874.4 — 925	50.6			
n101	1900 — 1910	1900 — 1910	1900 — 1910	10			
n102	5925 — 6425	5925 — 6425	5925 — 6425	500			

LTE: 3GGP TS 36.101 V18.6.0 (2024-06), 5G NR: 3GGP TS 38.104 V18.6.0 (2024-06)

Go Back to Cellular Antenna

Cellular LTE / 5G NR Frequency Band Guide

Band #	Uplink Band (MHz)	Downlink Band (MHZ)	Overall Band (MHz)	Total Bandwidth	LTE-M	LTE NB-IoT	5G NB-IoT
103	787 — 788	757 — 758	757 — 788	31		X	
n104	6425 — 7125	6425 — 7125	6425 — 7125	700			
n105	663 — 703	612 — 652	612 — 703	91			
(n)106	896 — 901	935— 940	896 — 940	44	X	X	
n109	703 — 733	1432— 1517	703 — 1517	814			

LTE-only Bands
5G NR-only Bands
Both LTE and 5G NR Bands

LTE: 3GGP TS 36.101 V18.6.0 (2024-06), 5G NR: 3GGP TS 38.104 V18.6.0 (2024-06)

Go Back to Cellular Antenna

GNSS Frequency Band Guide

GNSS Constellations and Frequency Bands

As of 2025, there are 4 Global Navigation Satellite System (GNSS) in operation as shown in **Figure 1**. United States' GPS (Global Positioning System), European Union's Galileo system, Russia's Glonass and China's BeiDou/Compass system. Satellite-Based Augmentation System (SBAS) are designed to enhance the accuracy of GPS, including Japan's QZSS (Quasi-Zenith Satellite System), India's GAGAN and European EGNOS. IRNSS (Indian Regional Navigation Satellite System) operationally also known as NavIC is a stand alone Regional Navigation Satellite System (RNSS).

GNSS Frequency Bands					
GPS	**L1**	**L2**	**L5**		
	1575.42 MHz	1227.6 MHz	1176.45 MHz		
Galileo	**E1**	**E5a**	**E5b**	**E6**	
	1575.42 MHz	1176.45 MHz	1207.14 MHz	1278.75 MHz	
Glonass	**G1**	**G2**	**G3**		
	1602 MHz	1246 MHz	1202 MHz		
BeiDou (Compass)	**B1**	**B1C**	**B2a**	**B2b**	**B3**
	1561 MHz	1575.42 MHz	1176.45 MHz	1207.14 MHz	1268.52 MHz
QZSS	**L1**	**L2**	**L5**	**L6**	
	1575.42 MHz	1227.6 MHz	1176.45 MHz	1278.75 MHz	
SBAS	**L1/E1/B1C**	**L5/E5a/B2a**	**G1**	**G2**	**G3**
	1575.42 MHz	1176.45 MHz	1602 MHz	1246 MHz	1202 MHz
IRNSS (NavIC)	**L5**				
	1176.45 MHz				

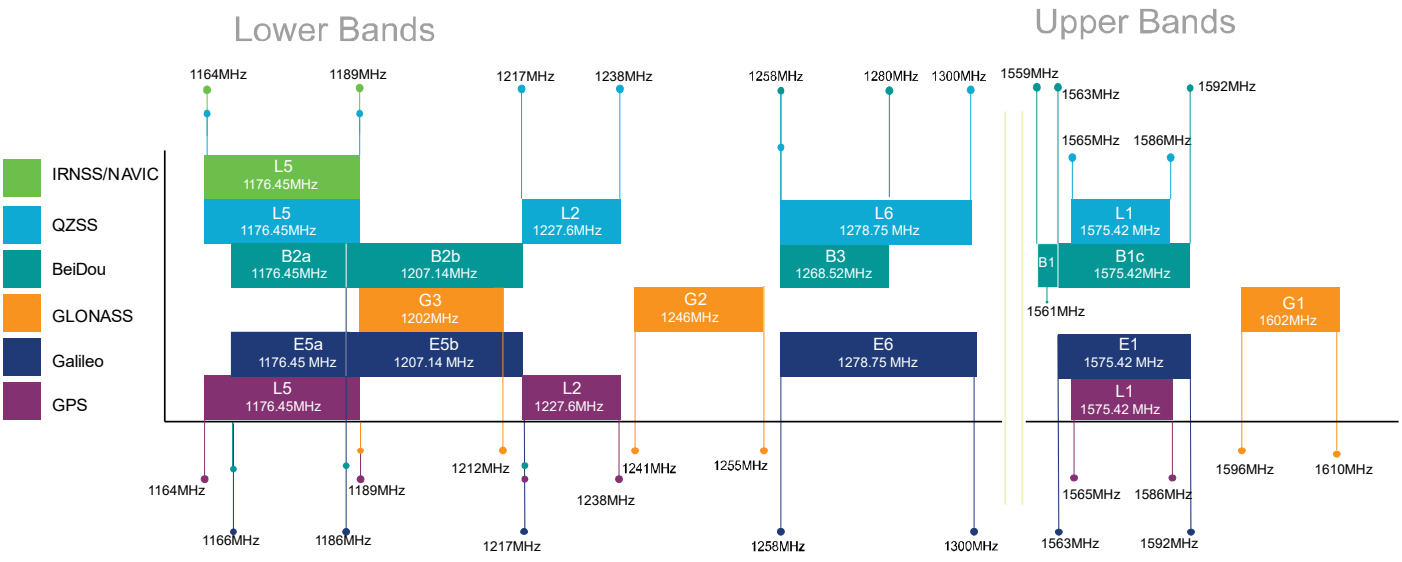


Figure 1. GNSS Frequency Bands

Go Back to GNSS Antenna