











5G-FR1 Multiband Flat 2x2 MiMo Antenna

W1856 – 617MHz to 7125MHz



Features & Applications:

-  2xMiMo antenna configuration
-  Omnidirectional radiation
-  Clip mount connections
-  Low profile (thickness 9.6mm/.377")
-  RoHS compliant
-  5G-FR1 Laptop connectivity
-  5G-FR1 Access Point and Routers
-  5G-FR1 Accessories
-  4G LTE Backward compatible
-  WiFi-6E/7 2xMiMo compatible

ELECTRICAL SPECIFICATIONS @ 25°C

General Specifications

Antenna type	Nominal Impedance	Polarization	Radiation pattern	Power withstanding	DC Ground
Dipole	50Ω	Vertical / Linear	Omni	2W	Yes

Typical RF Performance: 617 – 7125MHz

Port	Frequency (MHz)	617 - 960	1710 - 2690	3300 - 4200	4400 - 5150	5150 - 7125
Port 1 & 2	Return Loss (dB)	-6	-6	-7	-7	-5
	Avg. Peak Gain (dBi)	1.6	3.1	4.0	4.8	5.3
	Avg. Efficiency (%)	73	70	65	69	65
	Cable Loss dB	0.8	1.2	1.8	2.2	3.0
Port 1 to 2 Isolation	Port 1-2 (dB)	15	20	25	25	20

MECHANICAL SPECIFICATIONS

Orderable P/N: W1856

Dimension (Length x Width x Height)	Housing Material	Color	Weight	Connector Type	Cable Type Length
159.5 x 127.5 x 9.6 mm (6.28 x 5.02 x 0.377")	PC/ABS	Black	131.5g (1.85lbs)	SMA Male	RG174 1000mm (39.37")

ENVIRONMENTAL SPECIFICATIONS

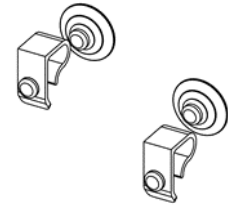
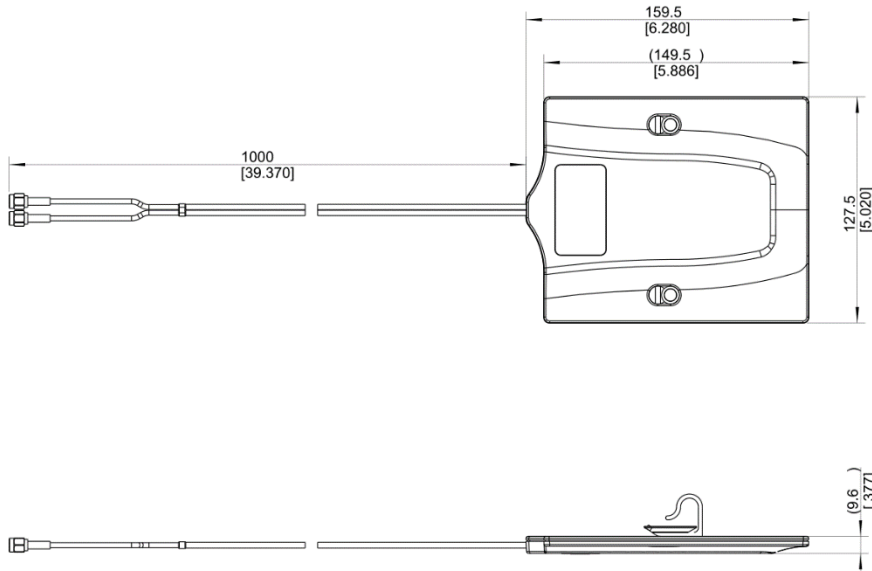
Operating Temperature	Storage Temperature	Ingress Protection	RoHS Compliant
-40 / +85° C	-40 / +85° C	IP51	Yes

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Mechanical data and RF Test Setup

Drawings



Clips & suction cups

- Dimensions: inches (mm) Unless otherwise specified, all tolerances are ± 0.10 (0.25mm)

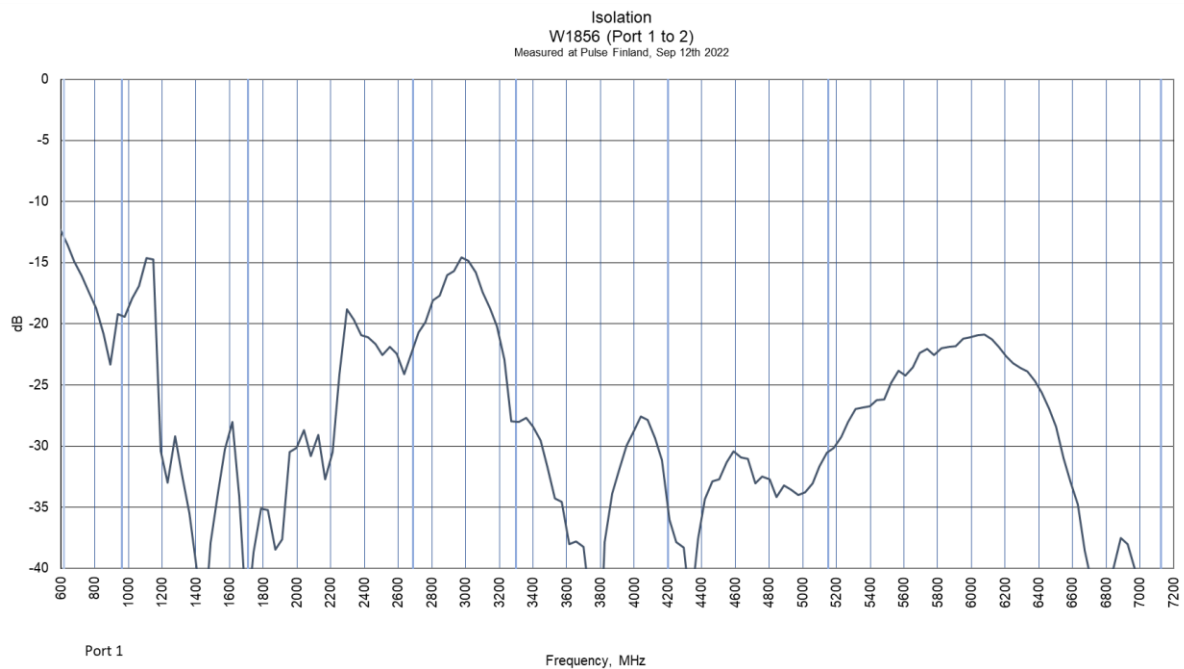
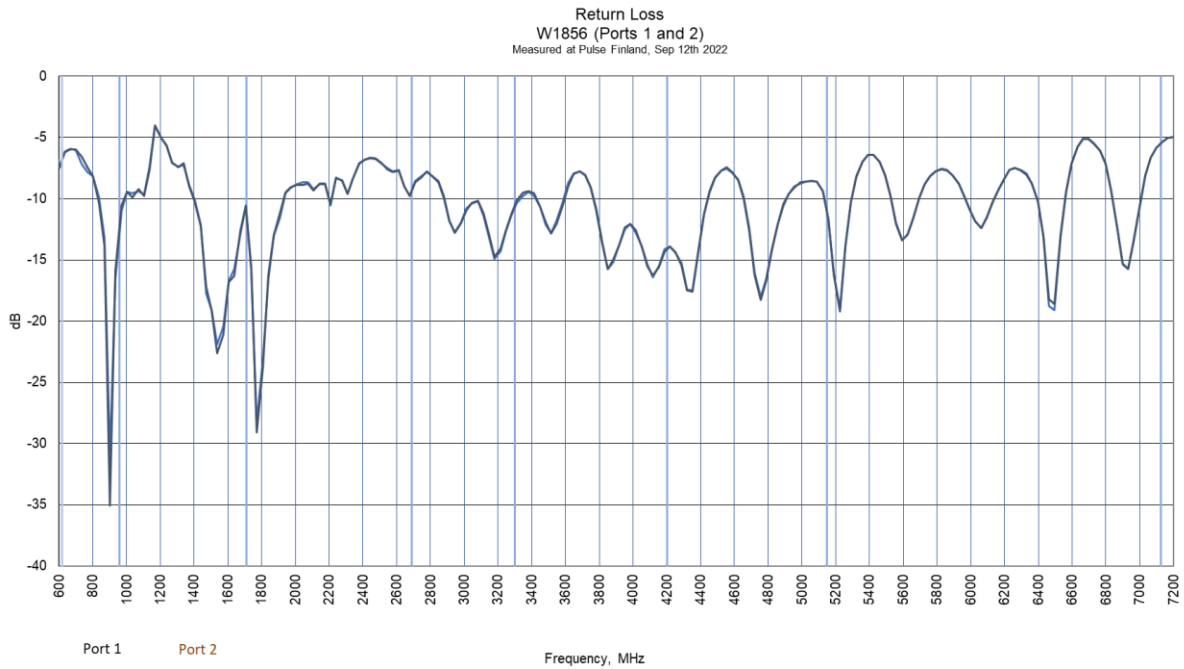
RF Test Setup

- S-parameters tested with 1.0 m RG174 cable
- Gain and Efficiency tested with 0.15 m Semirigid cable
- Measured at Pulse Finland in Satimo/MVG SG24L



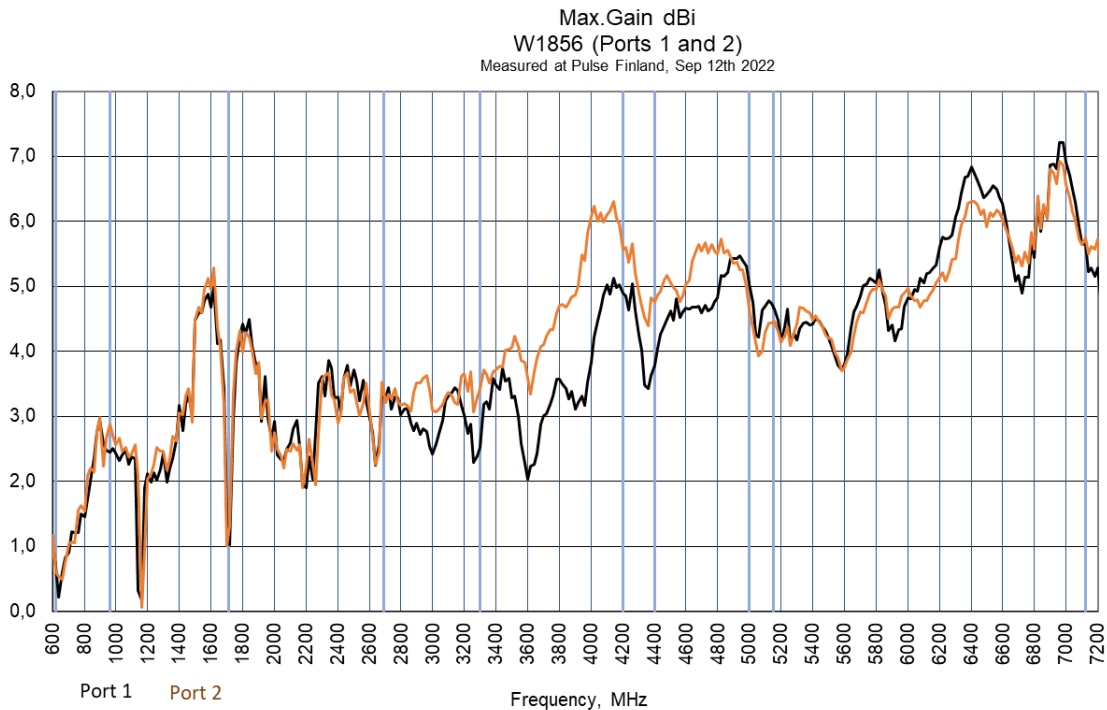
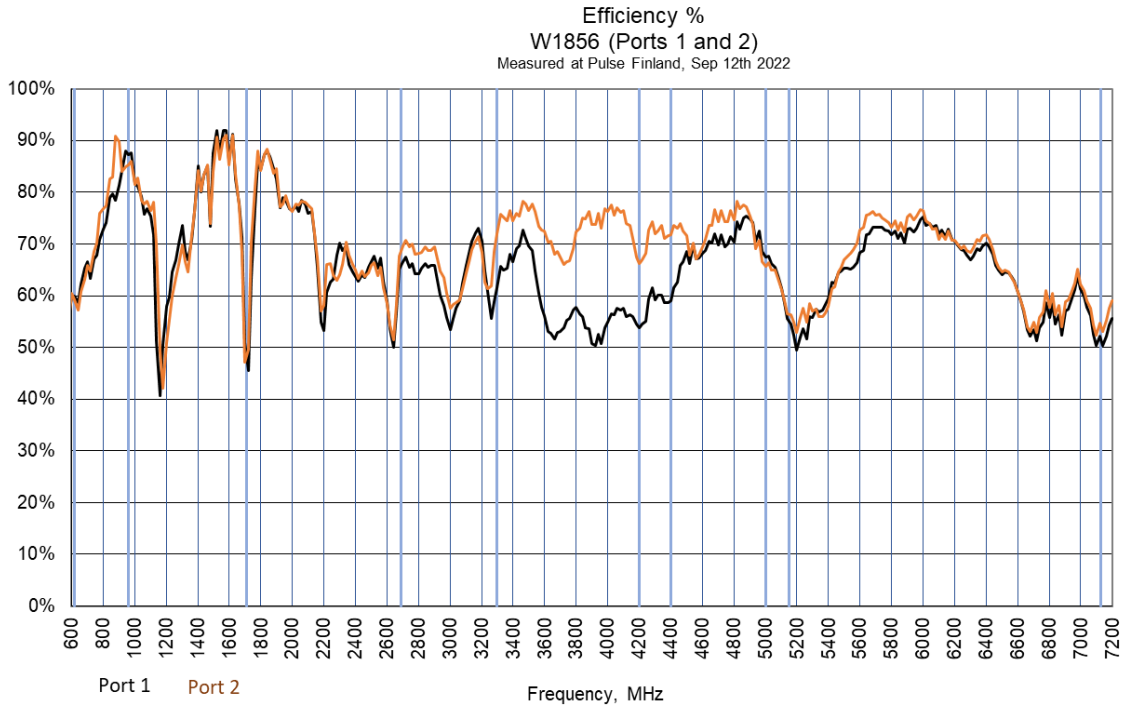
Charts - Return Loss and Isolation

S-parameter test data



Charts- Efficiency and Max Gain

Chamber test data

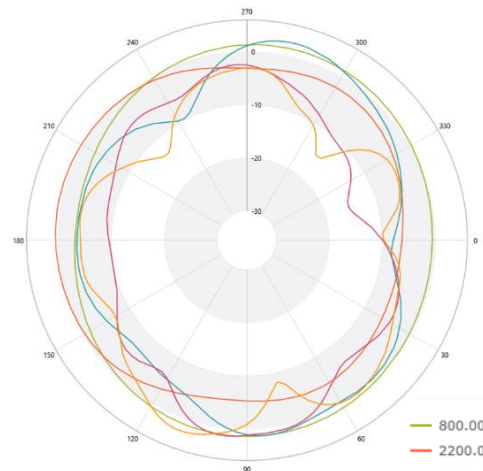
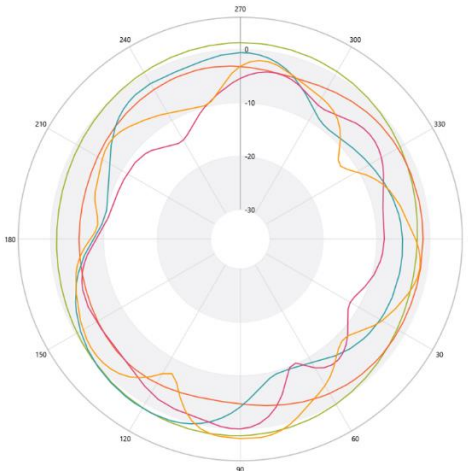
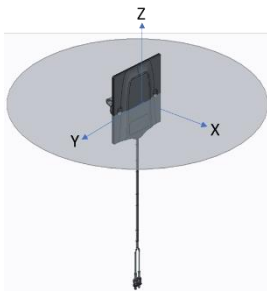
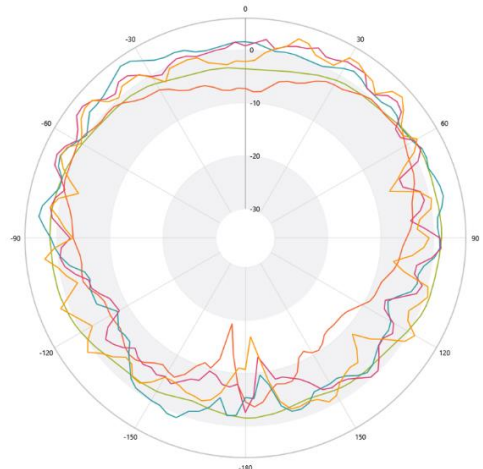
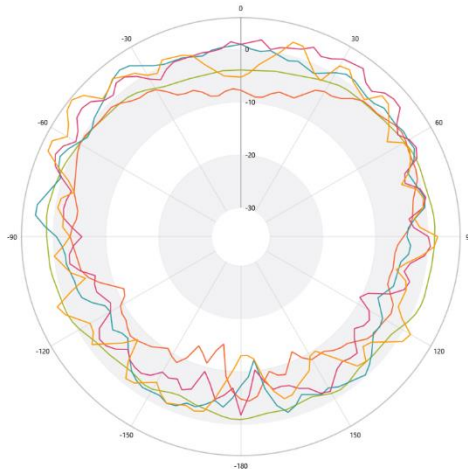
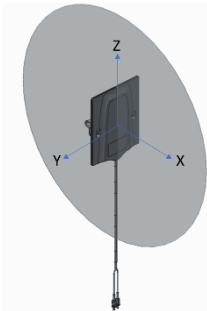
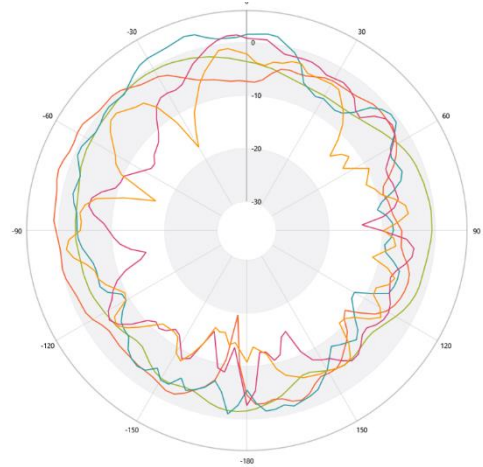
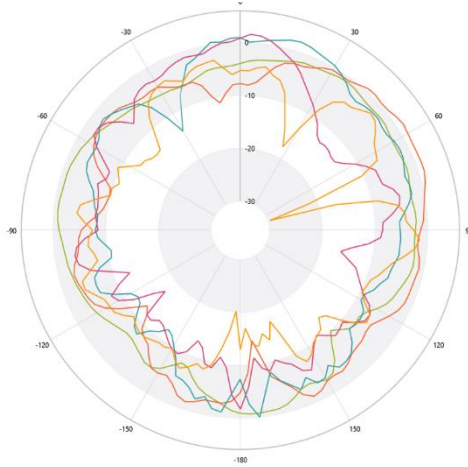
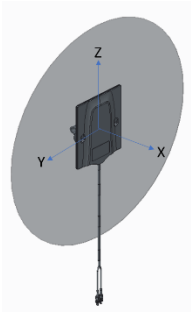


Radiation Pattern – Gain Plots

YZ, ZX, XY Planes

Port 1

Port 2



- 800.00 MHz 0.00 ° E Total
- 2200.00 MHz 0.00 ° E Total
- 3800.00 MHz 0.00 ° E Total
- 5160.00 MHz 0.00 ° E Total
- 7120.00 MHz 0.00 ° E Total

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PACKAGING

Packing method

PE bag + Foam bag + Carton box

1pcs/PE bag

5pcs/foam bag

50pcs/carton box

Carton box size: 558mmx382mmx210mm

For More Information:

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