infiniDome GPSdome2M
DATASHEET

GPSdome2M: GNSS Multi-Band 4-Element Anti-Jammer

Features

- Small form factor: <99x95x56mm, 500g
- Supporting 2-4 elements (antennas)
- Up to 3 null attenuation in each frequency (number of antennas -1)
- Null steering technology in minimal package
- Average power consumption < 9W
- Peak power consumption: < 16W
- IP65, -40°C to +71°C
- Protected frequencies (either):
  - GPS L1 + GPS L2
  - GPS L1 + GLONASS G1
- Latency: ~100ns (constant)
- Insertion loss: 6dB
- Intel gathering capabilities
- Compatible with most off-the-shelf active GNSS antennas
- Freely deployed anywhere on the platform (>10cm apart)
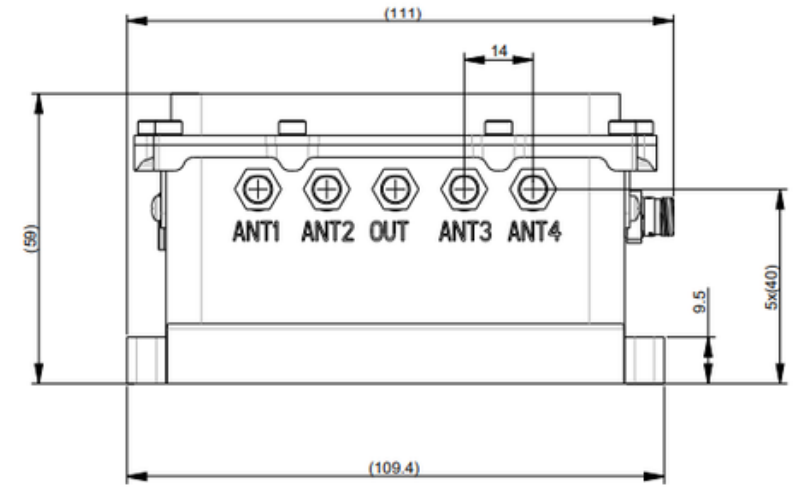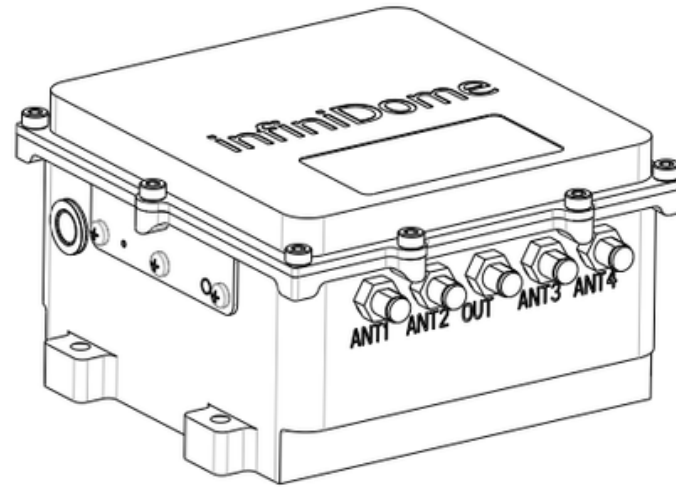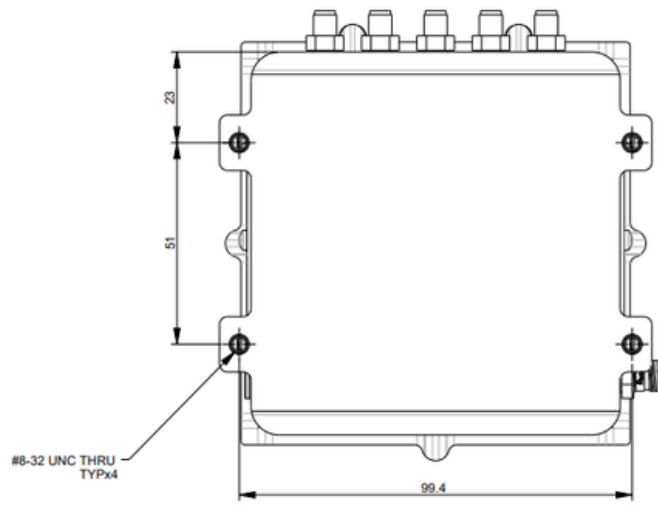

GPSdome2M provides protection against GPS jamming, ensuring continuity of autonomous navigation and operation during jamming conditions. No other solution that offers such protection is as small, light, affordable, retrofit or as easily installed as GPSdome2M.

Small • Simple • Flexible • Retrofit

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Product Dimensions

Product Specifications

Enclosed

Dimensions	99.4 x 95.7 x 56mm, (excluding mounting legs)
Weight	500g
Mounting	4 x 8-32UMC bolts (not supplied)

Environmental

Operating Temperature Range	-40°C to 71°C
Waterproof Rating	IP65

Optional Connector
MR11WS06 0210 BK1 E1AP 1

5VDC – 32VDC	Pin 5
GND	Pin 9
Dry contact	Dry contact – pin 2 Dry contact + 4
UART (3.3V)	RX Pin 7 TX Pin 8 GND Pin 6

RF Interfaces

Antenna Connectors	50Ω SMA 2.5VDC–5VDC (Active antenna with gain range between 26dB to 32dB)
Receiver Connector (R)	50Ω SMA

Performance

Protected Signal	L1+G1 or L1+L2
Latency	~100ns
Compression Point	P1dB -25dBm
Insertion Loss	6dB

EPS Product Wire

5VDC – 32VDC	Red
GND	Black
Dry contact (2 wires)	Dry Contact + Yellow Dry contact - White
UART (3.3V)	RX Blue TX Brown GND Black

Safety & Compliance

RoHS Compliant
CE Compliant
FCC Compliant
UKCA Compliant

MIL-STD

MIL-STD-810G	chg1, Method 501.6 and 502.6, Procedure I and II and as shown herein: (-40°C to +71°C), Method 514.7 Category 7 Table 514.7Cvi– General exposure, method 516.6 procedure I, II, III
MIL-STD-810H	Method 514.8 Category 4, Figure 514.8C-3, Table 514.8C-II in all axes, Figure 514.8 C-7
MIL-STD-461F/G	TBD

LED Indication

Constant Red	System Error
Flashing Red	System Initialization
Constant Green	System Operating (no jamming detected)
Alternating Between Orange and Green	System Operating (jamming detected)

Connector Pinout

JP1
MR11WS06 0210 BK1 E1AS
Fischer
View from soldering side
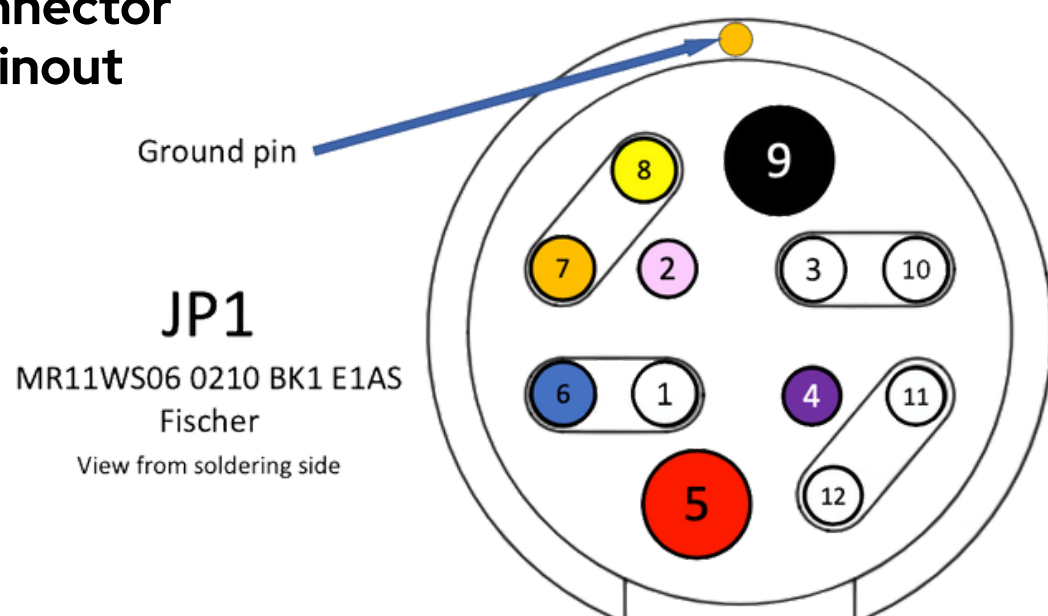
Ordering Information

GPSdome2M —— X X – X – X X – X

Protected frequency:	Connector/ Cable	Passthrough frequency (optional):	Receiver (optional)
1 – GPS L1	C – connector	0 - none	1 – u-blox M8N
2 – GPS L2	E – external cable	1 – GPS L1	2 – u-blox F9P
3 – GPS L5		2 – GPS L2	
4 – GLONASS G1		3 – GPS L5	
5 – Galileo E1		4 – GLONASS G1	