GPSdome2 DATASHEET

GPSdome2 protects against GPS jamming, ensuring continuity of autonomous navigation and operation during jamming conditions. It is compatible with almost any GNSS off-the-shelf receiver. Using up to 4 off-the-shelf active antennas, with dual-band protection it protects From up to 3 jamming directions simultaneously in each band.

No other solution that offers such protection is as small, light, affordable, retrofit or as easily installed as GPSdome2.

GNSS Multi-Band 4-Element Anti-Jamming

Key Features

- C-SWAP optimized
- Supports 2-4 elements (antennas)
- Up to 3 null attenuation in each frequency (number of antennas -1)
- Minimally packaged null steering technology
- Average power consumption < 9W
- Peak power consumption: < 16W
- Retrofit – Plug and Play solution
- Protected frequencies (either):
    - GPS L1/Galileo E1 + GPS L2
    - GPS L1/Galileo E1 + GLONASS G1
- Passthrough unprotected frequencies GPS L2 or L5 or GLONASS G1
- Intel gathering capabilities
- Compatible with most off-the-shelf active GNSS antennas
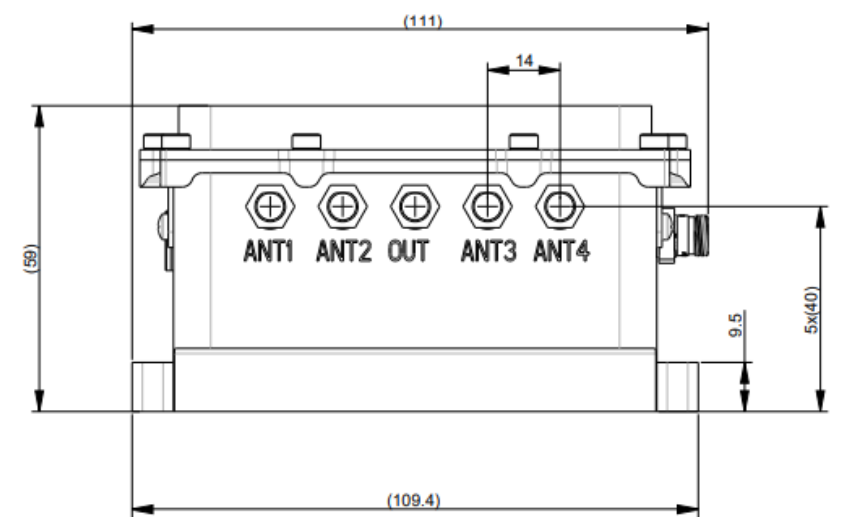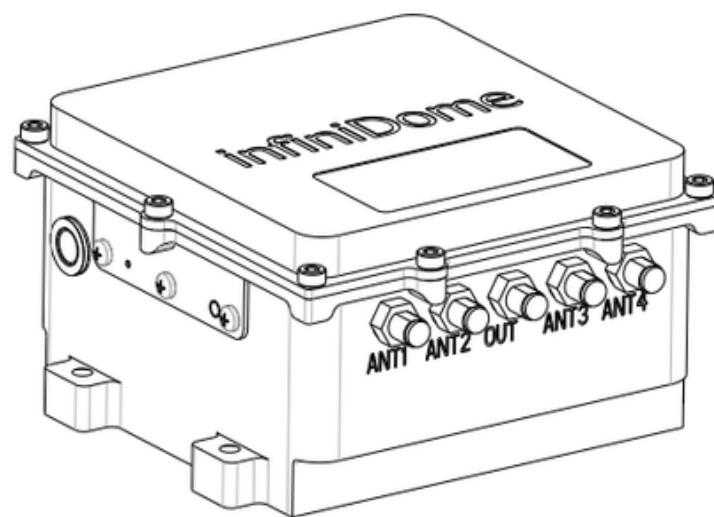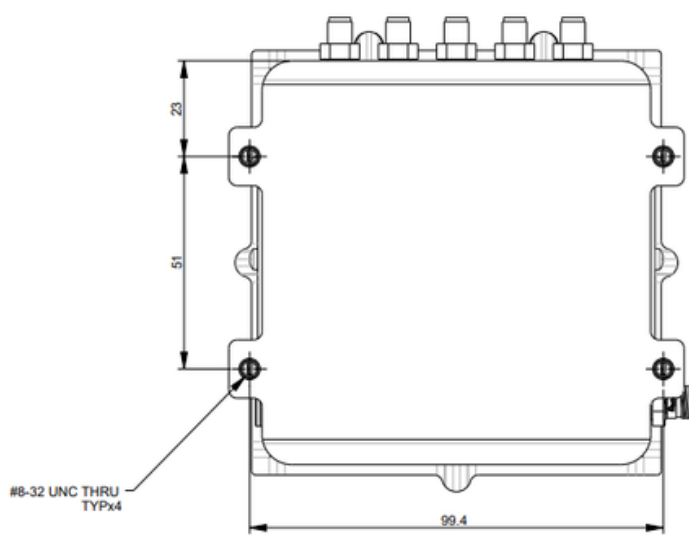- Optimal position antenna arrangement (>10cm apart)

Small • Simple • Flexible • Retrofit

Product Specifications

Physical

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

EPS Product Wire

Red	Power supply positive terminal (6vdc–32vdc)
Black	Power supply negative terminal
Purple	Dry contact jamming indication – positive terminal
Green	Dry contact –jamming indication – negative terminal
Orange Yellow Blue	UART RX UART TX UART GND

Performance

Protected Signal	L1/E1 + L2 L1/E1 + G1
Latency	~100ns
Compression Point	P1dB –25dBm
Insertion Loss	6dB

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)

RF Interfaces

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

Environmental

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

Safety & Compliance

RoHS Compliant
CE Compliant
FCC Compliant

Optional Connector MR11WS06 0210 BK1 E1AP 1

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

Product Dimensions

Ordering Information

GPSdome2 —— X X – X – X X – X

Protected frequency:	Connector/ Cable	Passthrough frequency (optional):	Receiver (optional)
11 – GPS L1 2 - GPS L2 3 - GPS L5 4 - GLONASS G1	C – connector E – external cable	0 - null 1 – GPS L1 2 – GPS L2 3 – GPS L5 4 – GLONASS G1	1 – ublox M8N 2 – ublox F9P

Connector Pinout

Ground pin

JP1
MR11WS06 0210 BK1 E1AS
Fischer
View from soldering side
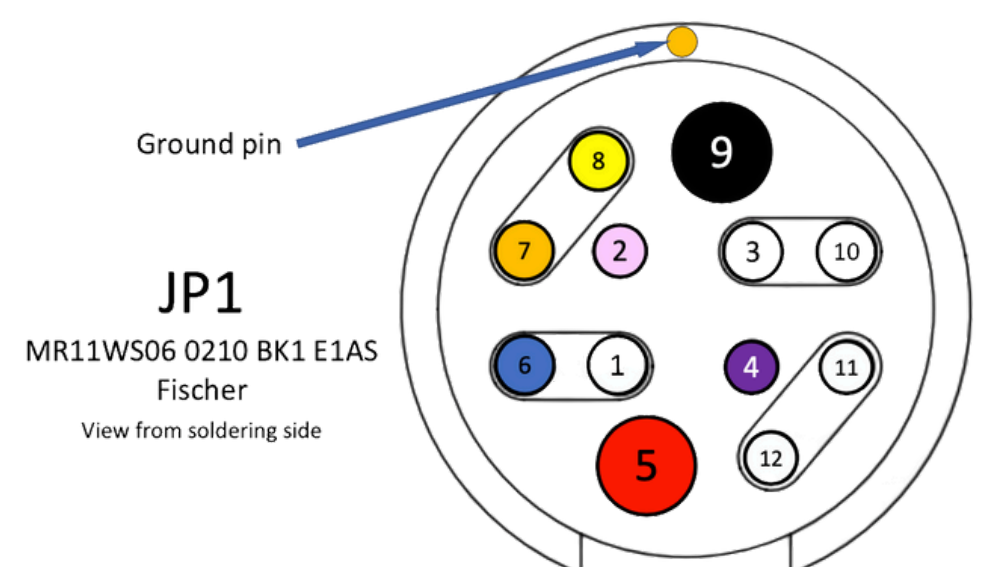
infiniDome, Ltd
7 Ha'eshel St. Industrial Park (South), P.O. Box 3358, Caesarea 3079504, Israel
info@infinidome.com • www.infinidome.com