

GPSdome-SunStone

DATASHEET

GPSdome-SunStone is a robust, small-sized, add-on module designed to ensure continuity of navigation and autonomous or safety of life operations during GNSS interference conditions. With advanced and upgradeable protection, detection and monitoring capabilities, this system effectively safeguards against current and future threats to GNSS. No other solution that offers such protection is as small, light, affordable, or as easily installed as GPSdome-SunStone.



The industry's most disruptive,
future-proof, GNSS Anti Jamming Solution

Key Features

- SW-defined, upgradeable anti jamming algorithms
- Fully retrofit and compatible with most GNSS receivers and active antennas
- Protected GNSS band (per client order)
- Passes through (unprotected) two additional GNSS bands (per client order)
- Average power consumption < 1W
- Peak power consumption: < 2.7W
- Cost, Size, Weight and Power optimized for UAS
- Ideal for time-sensitive applications with a minimal constant group delay
- Intelligence gathering capabilities in the battlefield (reported in real time via data output):
 - Frequency band of the jammer detected
 - Max power of the jammer detected

Small • Simple • Flexible • Retrofit



Product Specifications

PRODUCT DIMENSIONS*

Enclosed	80mmx79mmx28mm
	100g
	4 x M3 screw (not supplied)

*For protection of two frequencies housing will be 80mmx70mmx37mm

OEM	42mmx70mmx16.2mm
	50g

*For protection of two frequencies housing will be 42mmX70mmX25mm

LED Indicator

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

Performance

Protected Frequency	One frequency band
Optional Secondary Protected Frequency	One frequency band
Passthrough	2 GNSS Frequency Bands
Latency	100ns ±15ns (fixed)
Compression Point	-23dBm
Path Gain	+/-3dB

RF Interfaces*

Antenna Connectors (A1/A2)	50Ω SMA 2.7VDC - 14VDC (Max Current 40 Miliamps per connector), designed for 15dB -40dB gain
Receiver Connector (RX)	50Ω SMA
Out2	50Ω SMA Direct path to secondary receiver

*OEM Solution uses MMCX connector

*To be used for heading calculations

Safety & Compliance

FCC Compliant

CE Compliant

RoHS Compliant

Wire Connection Description

Power supply positive terminal (6vdc-32vdc)

Power supply negative terminal

Dry contact jamming indication – positive terminal

Dry contact –jamming indication – negative terminal

UART RX
UART TX
UART GND

Environmental*

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

*OEM solution does not meet any IP rating

Product Dimensions

Not Final

Ordering Information

GPSdome-SunStone

X X - X - X X - X

Protected frequency:

0 - null
1 - GPS L1/GALILEO E1
2 - GPS L2
3 - GPS L5
4 - GLONASS G1

Enclosed/OEM

E - Enclosed
O - OEM

Passthrough frequency:

0 - null
1 - GPS L1/GALILEO E1
2 - GPS L2
3 - GPS L5
4 - GLONASS G1

Direct Path Second Receiver

1 - Yes
2 - No



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