

RAIDR



**JAMMING &
SPOOFING
PROTECTION**



LOW SWAP



**30DB NOMINAL
INTERFERENCE
SUPPRESSION**



**SITUATIONAL
AWARENESS**



ANTI-JAM CAPABILITY

RAIDR Resilient Assured Integrated Dual Receiver technology enables assured PNT with multi-constellation, multi-frequency positioning, combined with an active anti-jam nulling capability. RAIDR provides protected GNSS navigation for low size,

MULTI-FREQUENCY RESILIENCE

RAIDR can generate a spatial null within the L1 and L5 bands. The receiver signal plan also includes other GNSS signals for multi-frequency resiliency against interference, jamming and spoofing attacks. RAIDR combined with compatible antennas provides further protection with L5 independent positioning.

GNSS	SPATIAL NULLING AVAILABLE	TRACKED CONSTELLATIONS
GPS	L1 C/A, L5	L1 C/A, L2P, L2C, L5
BeiDou	B1C, B2a	B1C, B1I, B2a, B2b
GLONASS	N/A	L1
Galileo	E1, E5a	E1, E5a, E5b
QZSS	L1 C/A, L5	L1 C/A, L2C, L5
SBAS	L1	L1

Digital filtering is available on all tracked constellations.

FEATURES

- / Enables receiver-based anti-jam capability
- / Activates one spatial null for jamming and spoofing protection on L1 and L5 bands (independent)
- / Commercially exportable
- / Low SWaP anti-jam system
- / 30dB nominal interference suppression
- / Independent L5 positioning
- / Signal intelligence features: spectrum analysis jamming and spoofing detection

BENEFITS

- / Protection for L1 and L5 bands
- / Commercial off-the-shelf (COTS)
- / Assured positioning, navigation and timing through anti-jam, multi-constellation tracking and L5 independent positioning methods

TECHNICAL SPECIFICATIONS

PHYSICAL AND ELECTRICAL

Dimensions	126.5mm x 60mm x 34mm
Weight	<160g
Input voltage	+5 - +15VDC
Power consumption	3 W (typical)

RF AND ELECTRICAL SIGNAL TRACKING PRIMARY RF

GPS	L1 C/A, L2C, L2P, L5
GLONASS	L1
Galileo	E1, E5a, E5b
BeiDou	B1I, B2C, B2a, B2b
QZSS	L1 C/A, L2C, L5
SBAS	L1

SECONDARY RF

GPS	L1 C/A, L2C, L2P, L5
Galileo	E1, E5a, E5b
BeiDou	B1I, B2C, B2a, B2b
QZSS	L1 C/A, L2C, L5
SBAS	L1

ANTI-JAM MITIGATION

Maximum nulls	1 (L1/L5 bands, simultaneous)
Null depth	30dB (typical)

ALIGN HEADING ACCURACY (RMS)

Dual antenna (1.2G/2G Mini, 8.5cm baseline)	10 degrees (max)
---	------------------

VELOCITY LIMIT (without controls)

585m/s

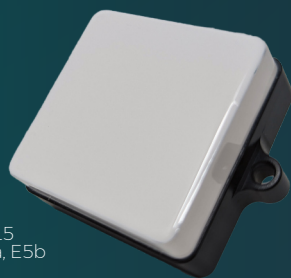
CONNECTORS

2X ODU
1X SMA

A CHOICE OF TWO ANTENNAS TO SUIT YOUR SIZE AND WEIGHT REQUIREMENTS:

1.2G-MINI-GNSSA15 ANTENNA

The 1.2G-Mini-GNSSA15 antenna offers the lowest size and weight combination for RAIDR. Requires customer provided ground plane.



RF AND ELECTRICAL SUPPORTED GNSS BANDS

GPS	L1, L2, L5
Galileo	E1, E5a, E5b
GLONASS	L1, L2
BeiDou	B1, B2, B2a, B2b
NavIC	L5
L-Band	

POWER

Input voltage	+2.7 to +15.0 VDC
Current draw	15 mA

PHYSICAL

Dimensions	32 x 32 x 14 mm
Weight	41g (SMA connector)
Temperature	-55°C to +85°C
Random vibration	20g RMS

CONNECTOR OPTIONS

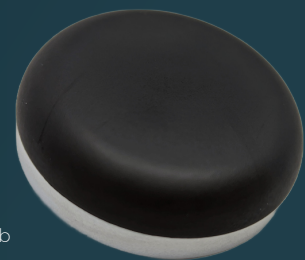
SMA, MCX, MMCX

COLOUR OPTIONS

Gloss White, Lustreless Grey, Camo Green, Lustreless Black, Desert Tan

2G-MINI-GNSSA15 ANTENNA

The 2G-Mini-GNSSA15 antenna offers small form factor with integrated ground plane.



RF AND ELECTRICAL SUPPORTED GNSS BANDS

GPS	L1, L2, L5
Galileo	E1, E5a, E5b
GLONASS	L1, L2
BeiDou	B1, B2, B2a, B2b
NavIC	L5
L-Band	

POWER

Input voltage	+2.7 to +15.0 VDC
Current draw	15 mA

PHYSICAL

Dimensions	57 x 17.5 mm
Weight	92g (SMA connector)
Temperature	-55°C to +85°C
Random vibration	20g RMS

CONNECTOR OPTIONS

SMA, MCX, MMCX

COLOUR OPTIONS

Gloss White, Lustreless Grey, Camo Green, Lustreless Black, Desert Tan