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QR200

GNSS L1/L2/E1 ANTENNA

Provides a robust RF link to GPS in a presence of an
unintentional or intentional RF interference



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QR200 anti-jamming antenna allows to mitigate an unintentional RF interference or jamming signal using a spatial domain of an antenna array reception pattern.

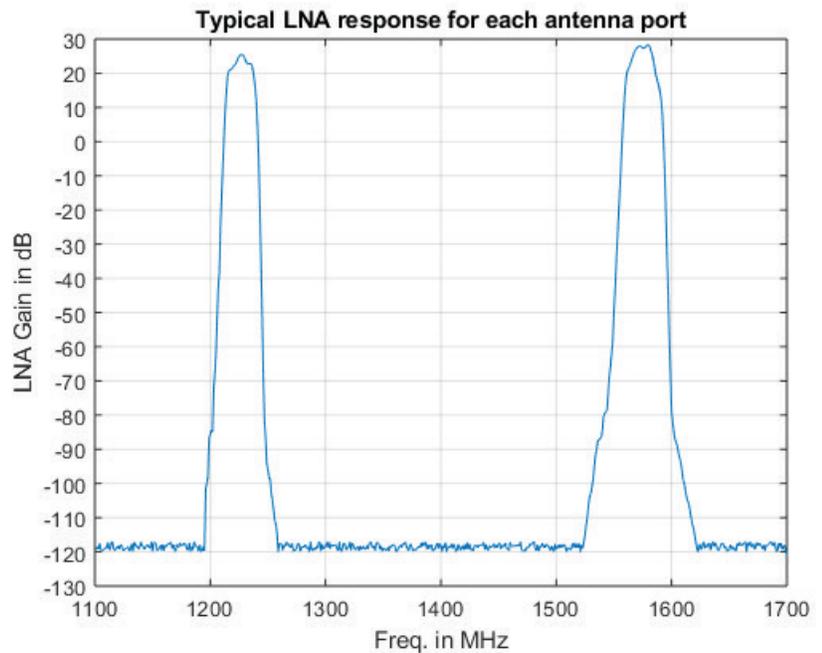
The unit default configuration (no jamming signal present) has a 120 deg phase gradient between antenna elements to maximize the reception of GPS right-hand circularly polarized (RHCP) signals.

The GPS receivers have inherent anti-jamming capability to mitigate minor interference levels of up to 30 dB J/S due to de-spreading technique of extracting GPS signal from the noise. The QR101 allows to extend this capability to medium and string interference signal levels by adapting a deep null in the antenna array reception pattern towards the source of interference. This approach prevents the RF front end from saturation when exposed to a high-power source or being in close proximity to a medium power source location. The anti-jamming algorithm is an adaptive type that simultaneously performs nulling in all GPS frequencies without the need of knowing the unit's orientation or position.

Ideal for small platforms with limited DC power source

Immunity to interference and jamming

Designed for harsh environments



QR200 Product Specification

Ordering Options:		QR200 (40 dB LNA gain – default config.)			
		Finish Colors: RAL 9003 (white – default), inquiry about other colors			
Electrical	Bandwidth	30 MHz	Mechanical & Environmental	Mounting	4x M4 Machine screws 3/8"-24 adapter
	Bands	L1/L2/E1		Diameter/Height	144 mm / 58 mm
	In-Band Rejection (adaptive null depth)	- 30 dB typical		Weight	500 grams
	Out-of-Band Rejection	- 120 dB		Operating Temp	-40° to +85° C
	Number of antennas	3 (internal)		Storage Temp	-55° to +90° C
	Noise Figure	1 dB typical		Vibration	Inquire
	LNA Gain	40 dB		Shock	Inquire
	Supply Current	250 mA		Waterproof Level	IP67
	Power Supply	3.5-12 VDC		Lightning	IEC61000-4-5 Level 4
	Compliance	CE, FCC, WEE, RoHS		Attitude	Inquire
			DC power Input	Center Conductor (SMA -jack connector)	