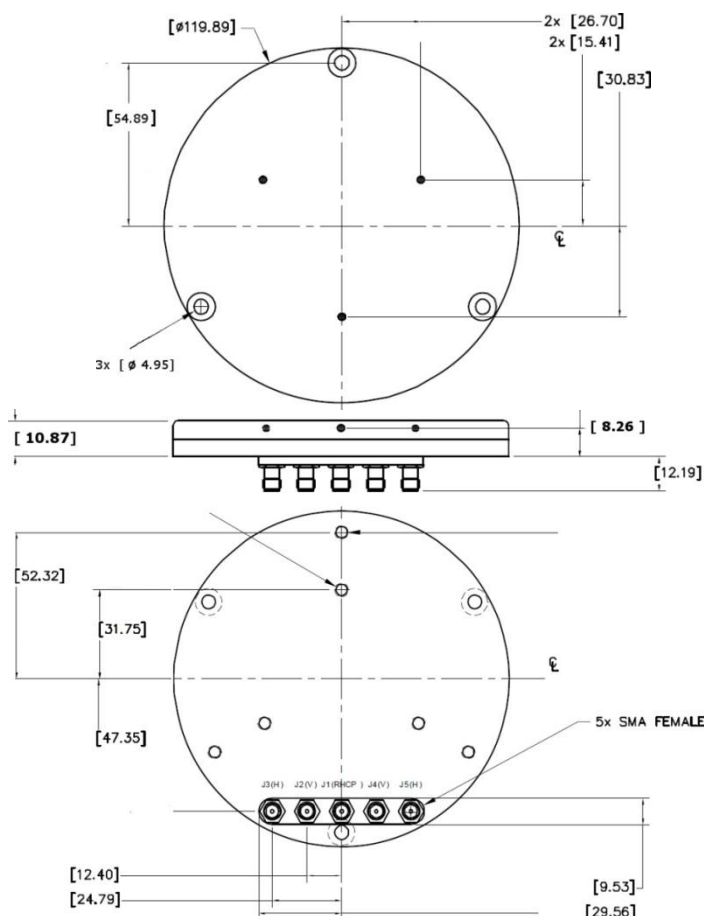


Anti jamming L1+L2 GPS antenna

Type: 3NF-4.7CG1215



Features:

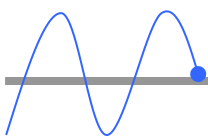
- Anti jamming antenna for elimination of GNSS jamming signals
- 3-element 5-channel CRPA-antenna (controlled radiation pattern antenna)
- Integrated Low-Noise-Amplifier (LNA)
- Designed to run even under harsh environmental and signal conditions
- Compatible with many receivers (e.g. from Novatel, Trimble)
- High redundancy due to multiple elements
- Designed for MIL application

Important note:

Use symmetric cable distances for antenna arrays to get in-phase signals! When using different cable lengths, the result will be out-of-phase signals! Please note that dimensions can be different at active / passive option. Specific dimensions are available on request.

Description:

This ruggedized GPS antenna can be used for mobile or stationary applications to protect GPS systems from jamming signals. The housing is made for harsh environmental conditions and includes a complete symmetrical 3-element 5-channel antenna array. The antenna array provides a high focused beam width and runs out-of-phase or in-phase. Another feature is the high input power level that the antenna can amplify without getting saturated. The total gain is 21dB. A precise signal reception is ensured. With our Low Loss HF cables it is possible to run the antenna at long cable length. The antenna is available with many different options (see options).



Anti jamming L1+L2 GPS antenna

Type: 3NF-4.7CG1215
Technical Data:

Frequency:	L1: 1560MHz ~1590MHz L2: 1212 ~ 1242 MHz
Radiation Pattern:	Hemispherical
Polarization:	RHCP (Right Handed Circular Polarization)
Band width:	30 MHz
Beam width:	L1 = 112° // L2 = 104°
Gain:	21 dB (antenna+LNA)
Axial Ratio:	2 dB
Antenna gain:	L1: 4.5 dbic @ Zenith / min. 1.1 dbic @ 60° L2: 2.5 dbic @ Zenith / min. 1.7 dbic @60°
Rejection:	L1: -20 dB / -20 dB (@ -50/+50 MHz) // max. -50 dB (@-100/+100 MHz) L2: -20 dB / -20 dB (@ -50/+50 MHz) // max. -50 dB (@-100/+100 MHz)
LNA P1db Out:	+15 dBm (input power level at which the gain ratio decreased by 1 dB)
LNA Noise Figure:	3 dB
VSWR Output	Max. 1.5 : 1
Power Supply:	2.5 – 24 Volt DC (only active)
Current Consumption:	20 – 50 mA (3.3V = 30 mA, 5V = 35 mA) (only active)
Impedance	50 Ohm
Material:	Aluminium bond base // finish: Polyurethane enamel
Weight:	ca. 400 g
Max. altitude:	21.300 m
Max. acceleration:	30 g
Environmental conditions:	hermetically sealed / skydrolresistent / UV stable / flame retardant / abrasion-proof
Operation temperature:	-50 ° C ~ + 85 ° C

Options:

part number structure:

XNF - 4.7CG1215 A2L - X X - X

e.g.: 3NF - 4.7CG1215A2L-MT-1 =
3-element, magnet mount,
active20dB+Limiter,TNC-f, white

- 1 = white, 3 = olive, 4 = black
- S = SMA, T = TNC, N = N (female)
- X = without cable, M = magnet mount
- see chart
- 3 = 3 Element / 5 Element / 7 Element

Connector type:	TNC-f / SMA-f / N-f (-xT-x / -xS-x / -xN-x)
LNA options:	AL= active+Limiter, A2L= active 20dB+Limiter, Filter, 1RHCP, 2E, 2H Pol P= passive, P2= passive without DualRHCP/LHCP, P2L= passive without Dual Linear Polarisation
Colors:	white, olive, black (-xx-1 / -xx-3 / -xx-4)
Dimensions:	ca. 12.90 (H) x 120 (B) x 120 (T) mm
Lightning Protection:	DC Grounding

S. 2 3NF-4.7CG1215-31206011 [Do you have questions about this product? Contact us:](#)

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