



Specification

SPECIFICATION

Part No.	:	A.01.B.301111
Product Name	:	GPS Hercules Heavy Duty Screw Mount Antenna
Description	:	Two Stage 28dB Active GPS Antenna. Height 29mm Diameter 49mm
Applications	:	Location based services M2M Telematics Remote monitoring Timing for base stations Vehicle fleet tracking



Version	Date	Page	Revision Description	Prepared	Approved
B	Jul 21 st 2010	All	Mechanical Change	TW Product Centre	Zita Lin



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I. Scope

The A.01 Hercules is a high performance thread mount GPS antenna designed for external use on vehicles and outdoor assets. Designed for heavy duty work with one piece C&C machined nickel steel base plate and threads, there are also convenient side slots for running cables laterally. Durable UV resistant ABS housing is resistant to vandalism and direct attack. At only 29mm high it complies with the latest EU directives for height restrictions, whilst also enabling covert operation with a diameter of 49mm.

Cable lengths, types and connectors are fully customizable. For cable lengths above 5M please use our 40dB LNA A-03 model and low loss cable.

II. Specifications

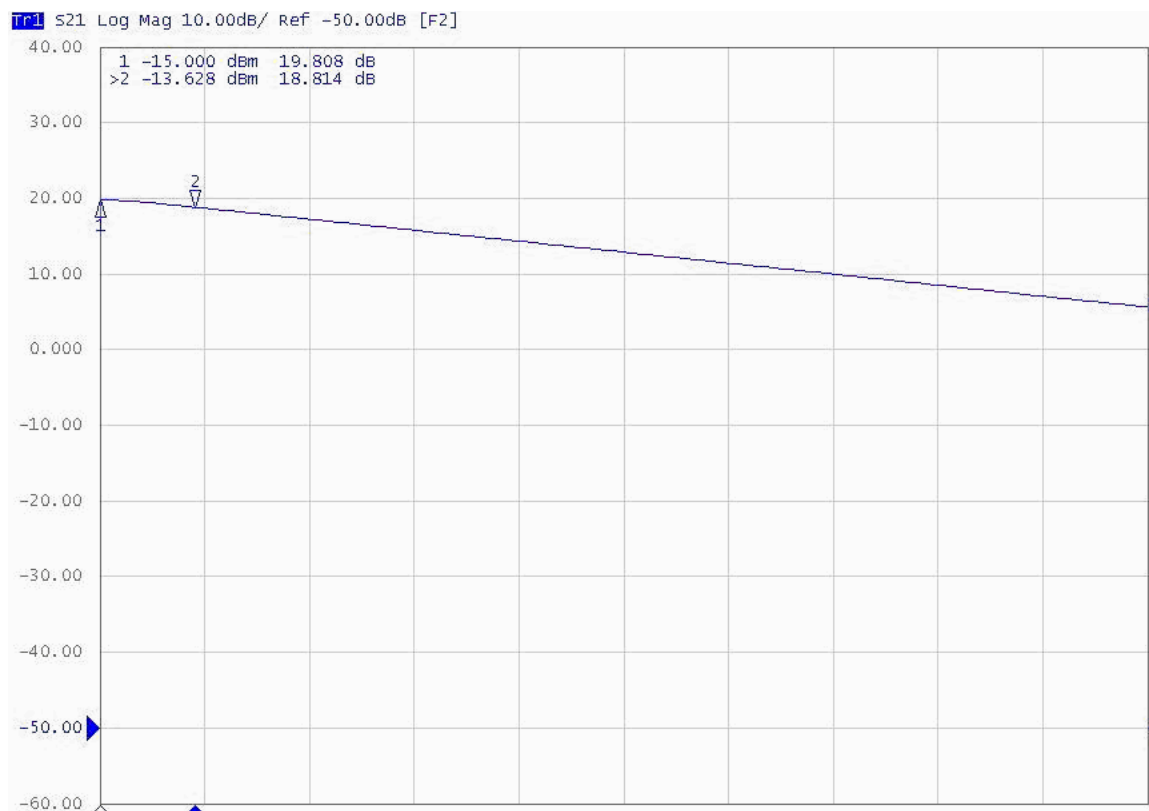
ELECTRICAL	
Frequency	1575.42MHz $\pm$ 2MHz
Dimensions	Height 29mm, Diameter 49mm,
Impedance	50 ohm
VSWR	2.0 Max
Gain	Typ. 28dB LNA Gain 5.0dB Passive Gain at Zenith -1.0dBi Gain at 10 degrees elevation
Axial ratio	3.0 dB max
Polarization	RHCP
Noise Figure	1.5 dB max.
Operating Temperature	-40°C ~ +85°C
Out Band Rejection	fo = 1575.42MHz fo $\pm$ 20 MHz 7dB Min. fo $\pm$ 30 MHz 12dB Min. fo $\pm$ 50 MHz 20dB Min. fo $\pm$ 100 MHz 30dB Min.
Input Voltage	Min:2.5V Max: 5.5V
Current Consumption	Typ: 13mA. Max: 16mA @3.0V Typ: 18mA. Max: 22mA @ 5.0V
MECHANICAL	
Housing	UV resistant ABS
Thread and Base Plate	One piece C&C'd Nickel Steel



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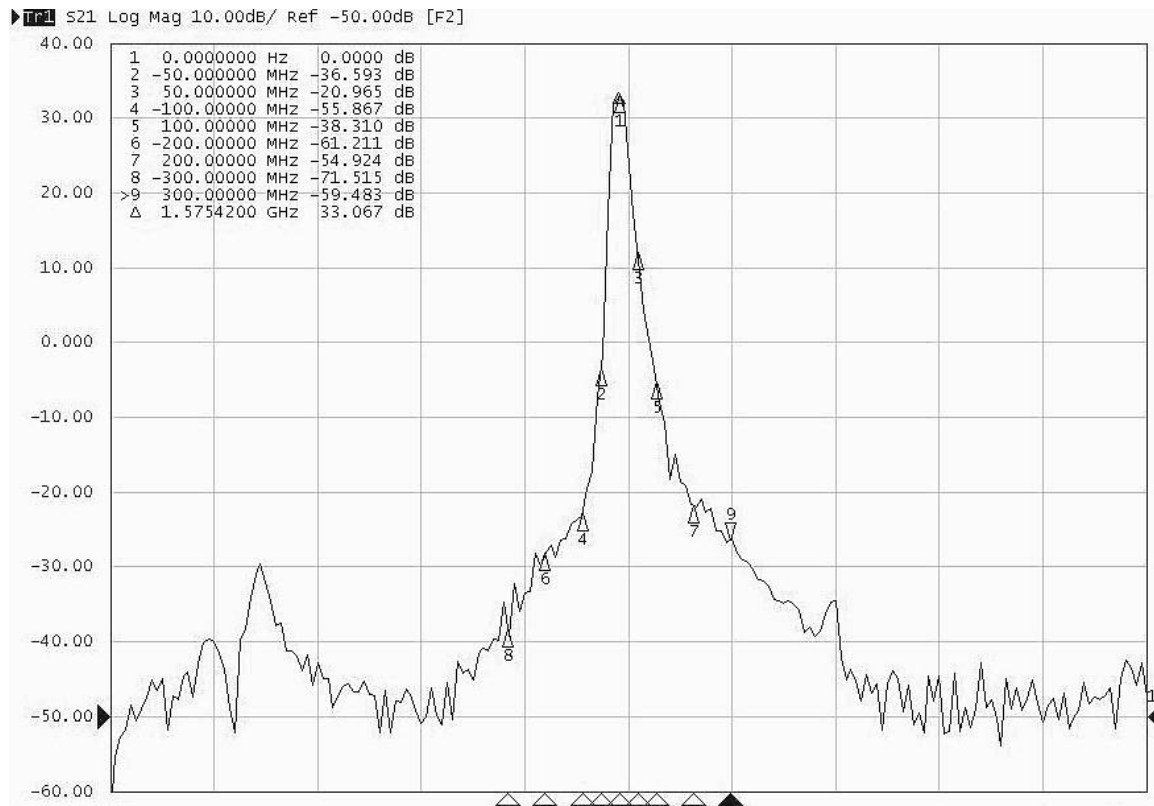
Sealing Foam	CR4305 with 3M9448B double-side adhesive
Waterproof	IP69K (DIN 40050-9/IEC 60529)
Thread Diameter	18mm
Recommended Mounting Torque	95Nm
Maximum Mounting Torque	135Nm
Storage Temperature	-40°C ~ +85°C
Cable/Connectors	3M RG-174 Cables and SMA Connectors (std) Fully Customisable

III. LNA Saturation Limit





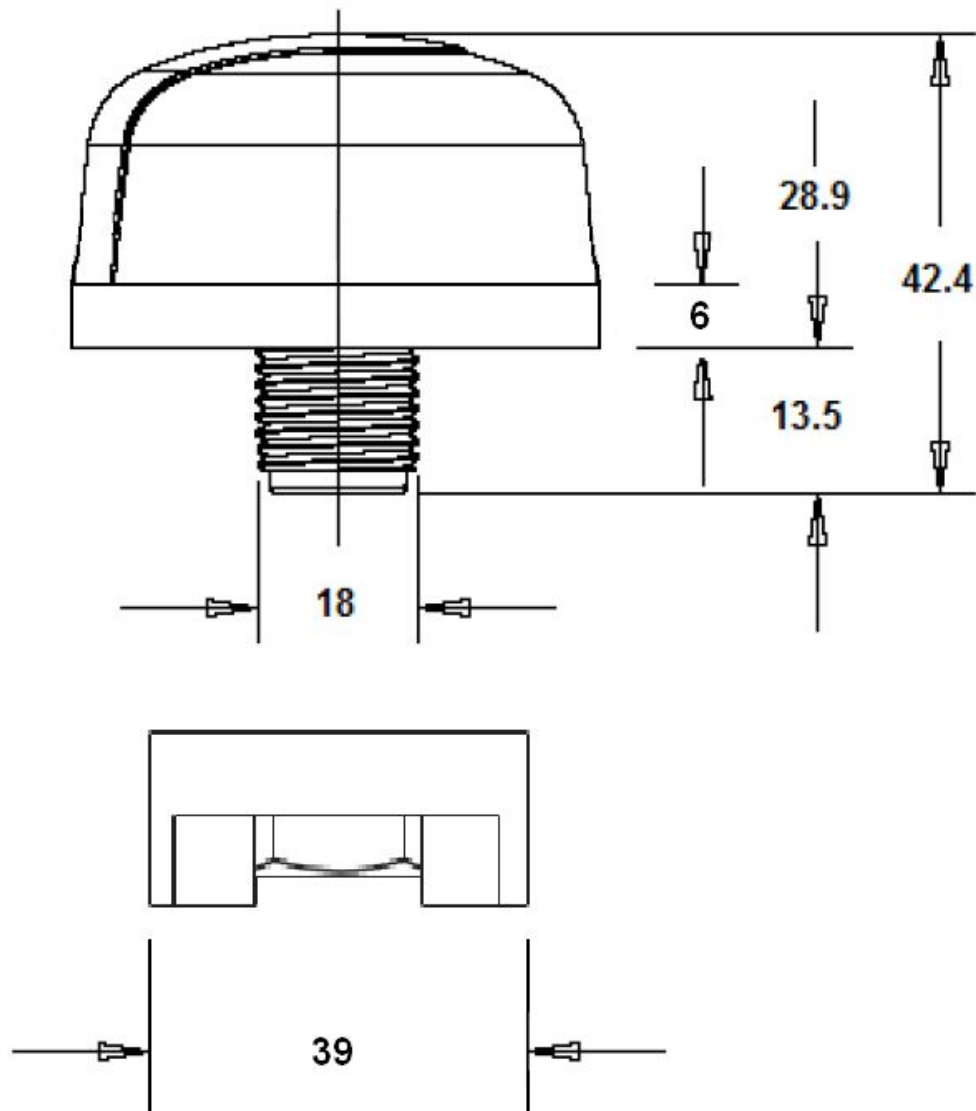
IV. Out of Band Attenuation





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V. Drawings

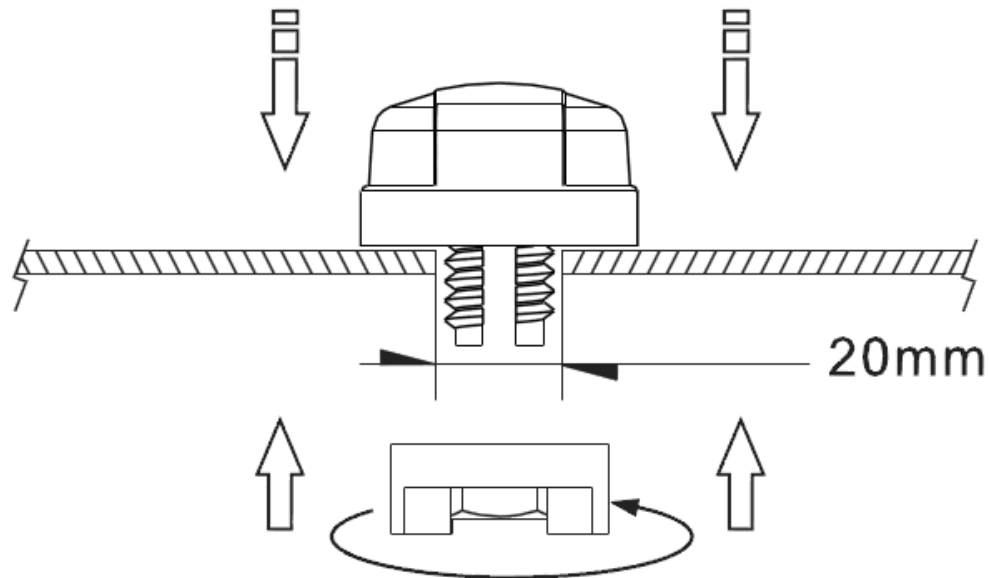


Unit : mm



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VI. Installation



Recommended torque for mounting is 95Nm or 70ftlbs

Maximum torque for mounting is 135.6Nm or 100ft lbs

