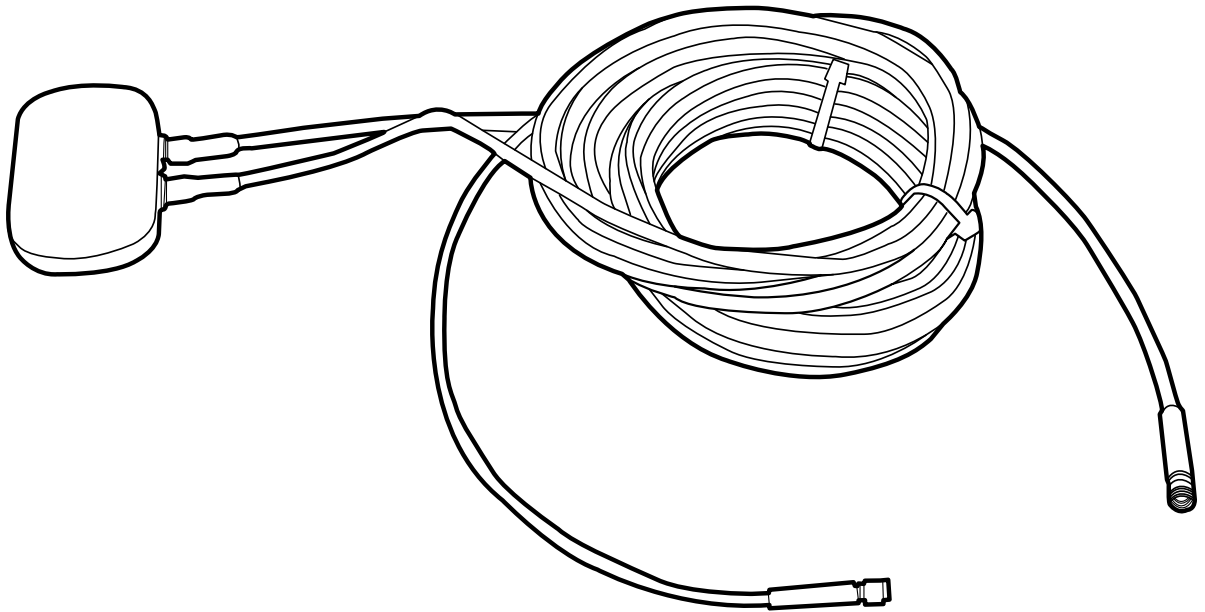


Beam Antenna RST705



The magnetic mount antenna provides a versatile solution that requires very little installation. The cable supplied is the maximum specified length to avoid any loss of signal and maintain call quality. It is not recommended to extend this cable further to avoid loss of dB beyond the specification.

The antenna should be attached to a metal surface and placed in a position that provides the greatest line of site to the sky, free of obstructions.

Note: Ensure that the Iridium Cable and GPS cable is attached to the correct antenna connection.

Applications



VEHICLES



IN BUILDING



TRUCK



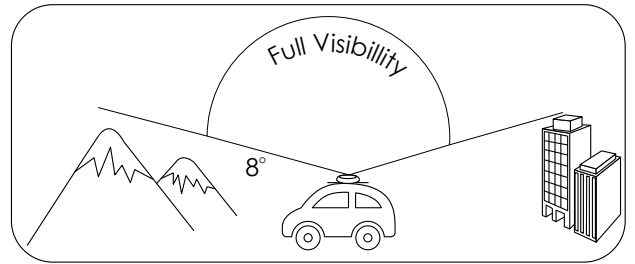
RAIL

Antenna installation is critical for optimum performance of your Iridium service.

Installation Guidelines

To ensure maximum performance of the antenna system and to maximise availability and reliability of service the antenna must;

- have a clear line of site to the sky
- be clear and free of obstructions
- be clear of metal objects
- be located away from other transmitting devices
- be securely affixed in location
- not be located indoors
- be installed in conjunction with a certified cable



Installing Antenna Cables

When installing antenna cables, follow these guidelines:

- Route and restrain cables to prevent them from vibrating or moving under normal conditions, which could result in damage to the antenna or the coaxial cable connections.
- Wherever the cables contact structures, protect the cables from chafing or abrasion. If a cable needs to be bent, avoid kinking it, and ensure that each bend radius follows the cable supplier limits.
- Use coaxial sealant, shrink-wrap tubing, electrical tape, or another suitable product to seal all cable connections appropriately to prevent moisture and corrosion damage from weather exposure.
- Mount all antennas vertically and clear of nearby metal obstructions
- Minimize horizontal obstructions as much as possible because they can create areas of poor system coverage.
- To minimize the loss of radio signal from the antenna to the terminal, the specific coaxial cable system between the antenna and the other component should be less than 3db including connector loss.

Installation Options

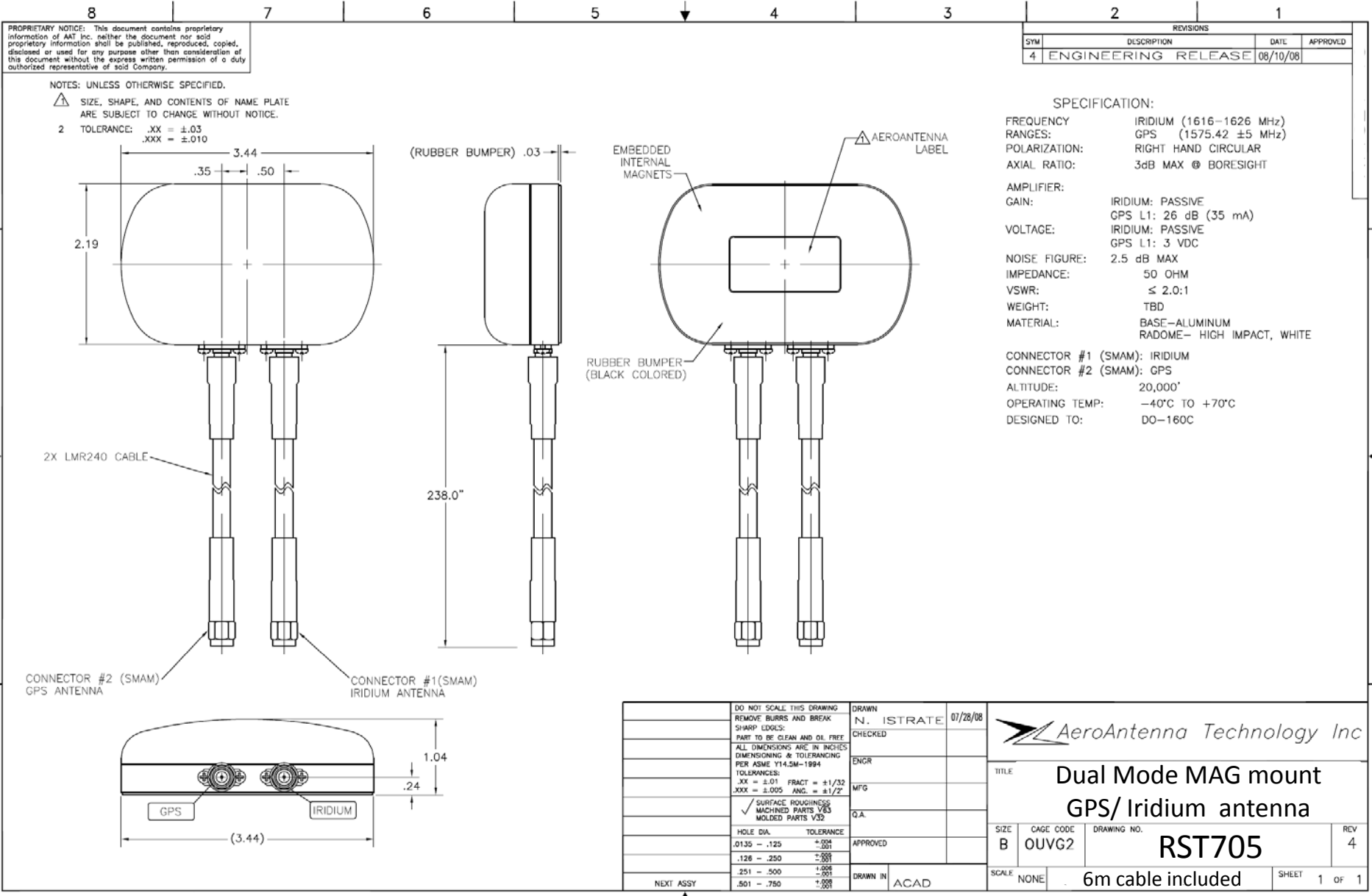
The antenna system is suitable for marine, vehicle and fixed applications and is designed to meet Iridium System performance requirements when installed according to the instructions in this guide.

The following figure shows typical Installations:

Preferred Antenna Location

Vehicle Antenna Installation The ideal position for any vehicle-mounted application is to capitalise on the greatest ground plane from the surface of the vehicle.	
Marine Antenna Installation The antenna must be installed without obstruction of other instruments or structures. The antenna must not be positioned within range of radar equipment or other RF interference.	
Fixed Site Installation The antenna must be installed without obstruction of other buildings, chimneys or other structures. Consideration should also be given to the surrounding environments such as large trees, mountains or other buildings.	

*Please note the Iridium antenna connector is now a TNCM connector. New specifications and drawings will be provided shortly.



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- NOTES: UNLESS OTHERWISE SPECIFIED.
 1 SIZE, SHAPE, AND CONTENTS OF NAME PLATE ARE SUBJECT TO CHANGE WITHOUT NOTICE.
 2 TOLERANCE: .XX = ±.03
 .XXX = ±.010

REVISIONS			
SYM	DESCRIPTION	DATE	APPROVED
4	ENGINEERING RELEASE	08/10/08	

SPECIFICATION:

FREQUENCY: IRIIDIUM (1616-1626 MHz)
 RANGES: GPS L1: 26 dB (35 mA)
 POLARIZATION: RIGHT HAND CIRCULAR
 AXIAL RATIO: 3dB MAX @ BORESIGHT

AMPLIFIER:
 GAIN: IRIIDIUM: PASSIVE
 GPS L1: 26 dB (35 mA)

VOLTAGE: IRIIDIUM: PASSIVE
 GPS L1: 3 VDC

NOISE FIGURE: 2.5 dB MAX
 IMPEDANCE: 50 OHM
 VSWR: ≤ 2.0:1
 WEIGHT: TBD
 MATERIAL: BASE-ALUMINUM
 RADOME- HIGH IMPACT, WHITE

CONNECTOR #1 (SMAM): IRIIDIUM
 CONNECTOR #2 (SMAM): GPS
 ALTITUDE: 20,000'
 OPERATING TEMP: -40°C TO +70°C
 DESIGNED TO: DO-160C

DO NOT SCALE THIS DRAWING	DRAWN	N. ISTRATE	07/28/08
REMOVE BURRS AND BREAK SHARP EDGES	CHECKED		
PART TO BE CLEAN AND OIL FREE	ENGR		
ALL DIMENSIONS ARE IN INCHES	MFG		
DIMENSIONING & TOLERANCING PER ASME Y14.5M-1994	Q.A.		
TOLERANCES:	APPROVED		
.XX = ±.01 FRACT = ±1/32			
.XXX = ±.005 ANG. = ±1/2°	DRAWN IN	ACAD	
✓ SURFACE ROUGHNESS MACHINED PARTS V63 MOLDED PARTS V32			
HOLE DIA. TOLERANCE			
.0135 - .125 ±.004			
.126 - .250 ±.001			
.251 - .500 ±.001			
.501 - .750 ±.001			

AeroAntenna Technology Inc

TITLE: **Dual Mode MAG mount GPS/Iridium antenna**

SIZE: B CAGE CODE: OUVG2 DRAWING NO.: **RST705** REV: 4

SCALE: NONE 6m cable included SHEET 1 OF 1

NEXT ASSY