



OVERVIEW

Iridium satphones were designed to operate with a passive antenna, either an element attached directly to the handset, or a remote aerial connected with a short length of coaxial cable. A signal loss of more than 3dB in a remote antenna's connecting cable degrades performance due to attenuation of both the received and transmitted signals. A 3dB loss corresponds to approximately 20m of LMR600 or 6m of LMR240 coaxial cable, lengths that clearly restrict the mounting options for the antenna using standard down-leads.

ASE Fixed Mast Antenna, for use with the Iridium 9505A or 9555 satellite phones delivers exceptional reception performance for permanent in-building or marine applications. This antenna is designed for free-air operation, no ground plane.

ASE Fixed Mast Antenna Features:

- Use with any Iridium Satellite Phone or Dock
- Completely sealed and contains no moving parts
- For Threaded Pipe Mounting or Additional Mount
- Ideal for marine or in-building use





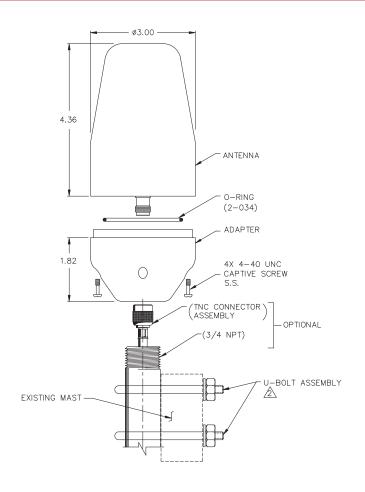
AVAILABLE CONFIGURATIONS

ASE FA-0	antenna only 🗶
ASE FA12	12m (39 ft)
ASE FA20	20m (65ft)

NOTE: The antenna cable must ensure a loss of < 3 dB and the minimum link margin of 12.1 dB must be maintained.

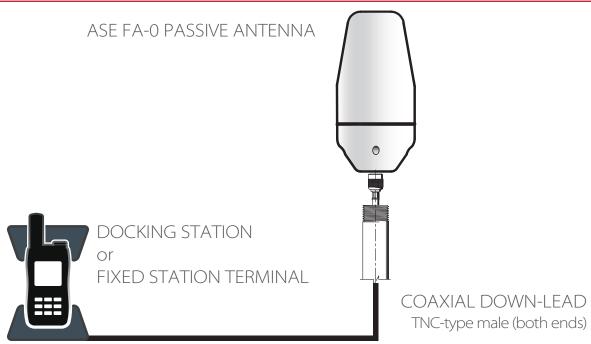
SPECIFICATIONS

Dimensions: (excl. mounting bracket)	Length: 18.7cm (7.4") Diameter: 7.6cm (3")		
Weight: (excl. mounting bracket)	311.85g (11 oz)		
Operating Temperature:	-40 to +85 degrees C		
Antenna Head Connection:	TNC female		
Frequency:	1616 – 1626.5Mhz		
Polarization:	Right Hand Circular		
Antenna Type:	RHCP Dipole		
Antenna Gain (dBic):	0.0 dBic		
Radiation Pattern:	0.4dBic: 0° = 0°m 1.4dBic: 0° < Zenith < 45° -0.25dBic: 75° < Zenith < 82°		
Return Loss (minimum):	9.5 dB (<2.0:1 VSWR)		



pg2 rev 1.3

SYSTEM CONNECTIONS



- (1) Mount ASE antenna with clear view of sky using bracket or direct threaded pole.
- (2) Attach top end of the coaxial down-lead to TNC type connector on underside of antenna.
- (3) Attach bottom end of down-lead to TNC type connector on the docking station or fixed station terminal.
- (4) Power up docking station or fixed station terminal.
- (5) Turn on Iridium satphone and log-in.

CABLE TYPES

Туре	Manufac.	dB loss/ft	TNC loss	Max Length	Cable Dia.	Bend Radius
LMR240	Times	0.103	0.72	22.1	0.240	0.75
LMR400	Times	0.05355	0.72	42.6	0.405	1.00
LMR600	Times	0.0347	0.72	65.7	0.590	1.50

Max length calculated for 3dB loss at Freq. = 1626.5 MHz

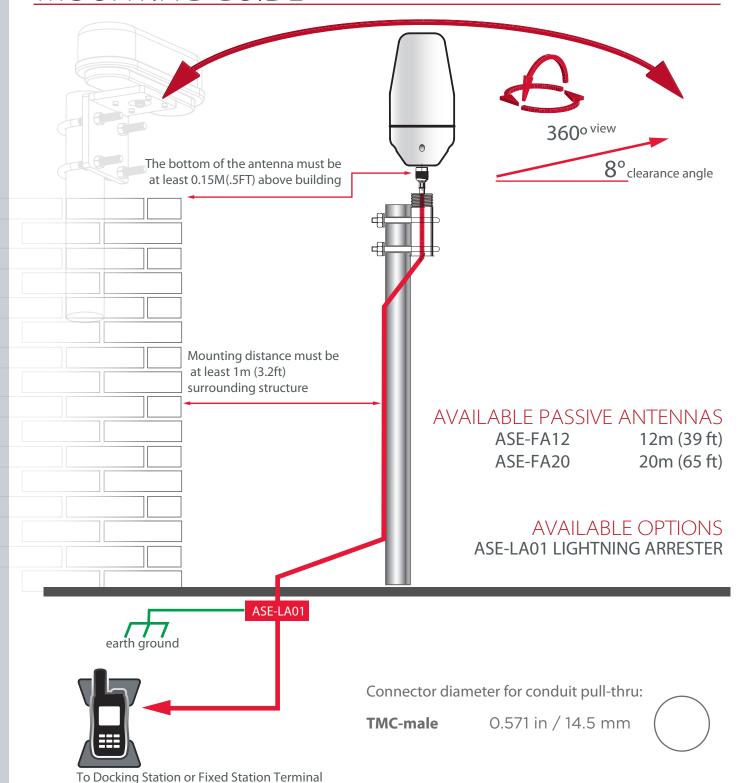
Min TMC loss = $4 \times 0.18dB = 0.72dB$

Sources: Times Microwave (LMR cable), Amphenol (TNC)

pg3 rev 1.3

ridium^e Everywhere

MOUNTING GUIDE



pg4

Shakespeare 4720 rail mount

(optional)

