



# Inflatable Deployable Satellite Communication Systems

## GATR Antenna Systems

1.8m and 2.4m (Ku- and C-band)

The GATR Antenna Systems are deployable inflatable satellite communication terminals serving the military, public safety, humanitarian aid, and broadcast sectors. GATR's unique inflatable design enables deployment of a 1.8 and 2.4 meter terminals in as few as two airline checkable cases, simplifying transportation and set-up, and making it ideal for first-in deployments, remote applications and contingency scenarios. The patented design combines the transmission power advantages of a large aperture/high-bandwidth antenna with the low weight and portability of a much smaller antenna.

### Quick, Simple Set Up

On Satellite in Under an Hour

### Complete Solution

Includes Complete Antenna, RF Equipment, and modem for Transmitting and Receiving

### Innovative Technology

- Antenna Weight <18 Pounds
- First FCC Certified Inflatable Antenna
- Full Antenna System Can Be Shipped In Two Airline Checkable Cases

### Low Power Consumption / High Gain

Large Gain Enables Lower Satellite Power Compared to Smaller VSAT Dishes

### Rapid Redeployment

Ready for Transport Within 15 Minutes



**GATR Operates in Extreme Heat... Extreme Cold...**



**... and Extreme Situations.**



**GATR Technologies®**  
**Enabling Communications Around the World**

[www.gatr.com](http://www.gatr.com)



# GATR Technologies®

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# GATR Antenna Systems Specifications (1.8 and 2.4 meter)

## GATR 1.8m Antenna System

Specification	Ku-band
<b>Set Up Time</b>	40 minutes on satellite
<b>Size/Weight</b>	
Case 1 (31x20x15 in.)	75 lbs. *
Case 2 (31x20x15 in.)	75 lbs. *
Case 3 (31x20x15 in.)	-
<b>Antenna and RF System</b>	
Optics	Prime Focus
Reflector Construction	Flexible conductive composite fabric
Az/EI/Pol	Manual point and align
Modem	iDirect (standard) but works with all other standard satcom modems
Satellite Location Controller	iDirect™ SNR tuning. Satellite acquisition, peaking, and cross pol adjustment using GPS or compass, and level inputs
Interface	CAT-5 cable for IP applications
Elevation	10 to 75 deg
Azimuth	+/-10 deg of hold-downs
Polarization	linear
Gain (transmit)	46.0 dBi
Gain (receive)	44.7 dBi
Cross-Pol Isolation	> 32 dB
G/T	23.9 dB/K @ 20 deg elevation
EIRP	51.1 dBW with 3 Watt BUC
LNB	Gain = 62 dB, NF = 0.7 dB
TX Radiation Compliance (FCC)	Call Sign: E080108 File Number: SES-MOD-20090413-00482
Satellite System Compliance	Intelsat
<b>Environmental</b>	
Temperature	Operational: -15 to +55°C Storage: -40 to +60°C
Wind Load	40 mph Operational, 60 mph Survivable with anchor spikes
<b>Power Requirements</b>	
Power	120V AC
Consumption	Less than 300 Watt

## GATR 2.4m Antenna System

Specification	C-band	Ku-band
<b>Set Up Time</b>	40 minutes on satellite	40 minutes on satellite
<b>Size/Weight - Total</b>		
Case 1 (31x20x15 in.)	75 lbs. *	75 lbs. *
Case 2 (31x20x15 in.)	75 lbs. *	75 lbs. *
Case 3 (31x20x15 in.)	65 lbs *	-
<b>Antenna and RF System</b>		
Optics	Prime Focus	Prime Focus
Reflector Construction	Flexible conductive composite fabric	Flexible conductive composite fabric
Az/EI/Pol	Manual point and align	Manual point and align
Modem	iDirect (standard) but works with all other standard satcom modems	iDirect (standard) but works with all other standard satcom modems
Satellite Location Controller	iDirect™ SNR tuning. Satellite acquisition, peaking, and cross pol adjustment using GPS or compass, and level inputs	iDirect™ SNR tuning. Satellite acquisition, peaking, and cross pol adjustment using GPS or compass, and level inputs
Interface	CAT-5 cable for IP applications	CAT-5 cable for IP applications
Elevation	10 to 75 deg	10 to 75 deg
Azimuth	+/-10 deg of hold-downs	+/-10 deg of hold-downs
Polarization	linear/circular	linear
Gain (transmit)	41.5 dBi	48.2 dBi
Gain (receive)	37.4 dBi	47.2 dBi
Cross-Pol Isolation	> 32 dB	> 32 dB
G/T	16.6 dB/K @ 20 deg elevation	26.2 dB/K @ 20 deg elevation
EIRP	59.1 dBW with 80 Watt HPA	52.9 dBW with 3 Watt BUC
LNB	Gain = 59 dB, NF < 0.5 dB	Gain = 62 dB, NF = 0.7 dB
TX Radiation Compliance (FCC)	Call Sign: E090054 File Number: SES- LIC-20090330-00381	Call Sign: E080108 File Number: SES-MOD-20090413-00482
Satellite System Compliance	Intelsat	Intelsat
<b>Environmental</b>		
Temperature	Operational: -15 to +55°C Storage: -40 to +60°C	Operational: -15 to +55°C Storage: -40 to +60°C
Wind Load	40 mph Operational, 60 mph Survivable with anchor spikes	40 mph Operational, 60 mph Survivable with anchor spikes
<b>Power Requirements</b>		
Power	120V AC	120V AC
Consumption	Less than 900 Watt	Less than 300 Watt

\* weights represent baseline system including case, optional equipment will add weight to these figures