

Integrated SATCOM Terminal (IST-1.0CF) with 1.0M Quick Deploy Antenna (Replaces MST-100M)

The ACS IST-1.0CF is one of the lightest Quick Deploy Antennas on the market today. Features include integrated Modem, BUC and control systems. By far, this is the fastest auto-acquiring terminal available. The FL-IST uses a solid carbon fiber reflector. Its modular design, plug-n-play assembly and rapid acquisition enables operators to setup and be on the air in five (5) minutes or less. The terminal features:

- Base unit with modular BUC, antenna controller, modem and space for optional UPS and 1 Hour of standby battery operation
- 8 piece CF reflector, with latches
- Commercial and Military version Modems available
- Antenna mast designed with Q.D. RF and electrical connections to the FL-IST base unit
- Ergonomic design allow for easy setup in near darkness
- Standard Reflector colors: Desert Tan, OD Green, White



The ACS IST-1.0CF features the CAP-III™ Handheld Controller which locates the satellite in site survey mode and then physically interfaces with the IST for a one-button push to acquire and peak on the selected satellite. The standard integrated 20W linear Ku BUC provides sufficient power to support 2-way HD Full Motion Video, VoIP, data and Internet access. GPS is included internally or manual input using coordinates or SAASM input. Furthermore, with the presence of the motor-drives, the FL-IST provides a pathway to tracking LEO/MEO and inclined orbiting satellites. Available in 70cm mesh or 1.0M Carbon Fiber and 1.35M coming soon in carbon fiber. WGS Ready.

Mechanical

Ei/Az Drive	Motorized
Polarization Drive System	Manual Rotation of Feed
Reflector Construction	Deployable mesh (optional carbon-fiber)
Axis Travel	
Azimuth	+/- 175°
Elevation (reflector bore sight)	5 - 95°
Polarization	+/- 91°
Standard Integration Interfaces	
Tx Input @ Feed	Coax Adapter (cover)
Rx Input @ Feed	Waveguide flange (cover)
Weight	Fully Integrated Auto-Acquire Terminal ~37 lbs.

Environmental

Wind – Survival	Deployed: 45 mph (72 kph)
Wind – Operational	25 mph (40 kph) gusting to 30 mph (48 kph)
Pointing Loss in Wind (Ku RX):	
20 mph (48 kph)	0.1 dB
35 mph (72 kph)	0.4 dB
Temperature:	
Operational	-20°F to 130°F (-28°C to 55°C)
Survival	-50°F to 170°F (-45°C to 75°C)
Environmental construction	MIL-STD-810G (w/ Carbon Fiber reflector)

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RF/Electrical

Feed Type ►	Std. 2-Port Precision Ku-Band	
	Receive	Transmit
RF Parameter ▼		
Frequency Range (GHz)	10.95 - 12.75	13.75-14.50
Polarization Configuration	Linear orthogonal standard, optional co-pol	
Gain (mid-band)	40.0 dBi	41.5 dBi
-3dB Beam width (mid-band)	1.8°	1.5°
Radiation Pattern Compliance	FCC 25.209*, ITU-R S.580-6	
G/T with LNB, midband, clear horizon	19.6 dB/° K (50° LNB)	
EIRP (w/16W Linear BUC)		51.5 dBW
Antenna Noise Temp. (mid-band, 20° EI)	54° K	
VSWR	<1.50:1	<1.50:1
Cross-Polarization Isolation (Ku only)	>30dB	>30dB
Feed Port Isolation (Tx to Rx)	>35 dB	80 dB (W/ Incl. Filter)
Power	AC input: 90-256 VAC, 8A peak, 3A Continuous DC input: 15A @ 28 VDC	
Modem (Standard)	iDirect e850 or e950	

Available Options/Upgrades/Services

- X- & Ka-Band Interchangeable Feed Kits - WGS Ready
- External "low-power" Ku BUC for further weight reduction
- Modem Options – Provides direct interface to external modems (ACS IST-1.0MCF is modem agnostic)
- Internal BB2590 Battery/UPS provides 75 minutes operation and allows for "hot-swapping" of external batteries
- Segmented carbon-fiber reflector in 65cm, 1.0M and 1.35M versions
- Multiple band feed system available (Optional) eliminates changing feed, BUC and LNB's to change frequencies, with auto switching
- GPS DoS upgrade allows system to operate in Denial of Service areas of operation
- Hard Wall Transit Case
- Soft Back Pack Transit Case



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Model IST1.0CF IST with Reflector Deployed