



ACS-IST-60 (Integrated Satcom Terminal)

Tri-Band: X, Ku and Ka Bands

WGS Compatible



- **Superior performance system due to advanced offset antenna optics**
- Manual Point in just minutes
- Wide Temperature Range – hot or cold environments
- Built-in CAP-II™ Controller for quick antenna pointing
- Tough enough to work in the most challenging environments.
- DISA Certified FIPS 140-2 TRANSEC option
- Fully rugged terminal provides advanced Satellite communications to the edge, FOBs strategic command centers or backup communications where required.
- Quick set-up and deploy. CAP-II™ Controller guides operator to desired spacecraft in just minutes.
- Runs off of 12-36Vdc input MIL-STD-1275 Filtering included or 85-265VAC with optional Shore power adaptor.

- Advanced Satcoms Solution providing up to 45Mbps Downlink and 10Mbps Uplink*
- Voice, Video and Data. Ideal for Full Motion Video, VoIP or Large data transfers
- Available in X, Ku or Ka bands WGS Compatible
- Interchangeable BUCs, Modems and PS on-the-fly
- Airline carry-on for 16 watt Ku or Ka-Bands
- Available in 8-40 watt versions
- Dual Band option in Small footprint
- Antenna Options:
 - 60cm, 85cm or 1M Tri-Band Parabolic with tuned feed system or Single band flat Panel Array
- Includes BUC, Modem and Power Supply
- Modem Options:
 - iDirect e850MP, e950
 - Comtech DMD-1050
- DC power supply, AC power optional
- Complete 16 Watt *linear* Ku-Band, IST with iDirect modem weights less than 40 Lbs. (Including travel case)





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60 cm - Environmental

Wind	
Operational	
Without anchoring	25 mph
With anchoring	35 mph gusting to 45 mph
Survival (anchored)	80 mph in zenith (90° elevation) position
Pointing Loss in Wind	
X-band Receive, Operational winds	0.1 dB typical, 0.3 dB max
Ku-band Receive, Operational winds	0.3 dB typical, 0.7 dB max
Ka-band Receive, Operational winds	0.8 dB typical, 2.0 dB max
Temperature	
Operational	-22° to 125°F (-30° to 52°C)
Survival	-40° to 140°F (-40° to 60°C)



60 cm - Electrical RF

X-Band	Receive	Transmit
• Polarization	RHCP or LHCP	LHCP or RHCP
• Frequency Range (GHz)	7.25 - 7.75	7.90 - 8.40
• Gain (Midband) (dBi)	31.6	32.3
• VSWR	1.30:1	1.30:1
• Beamwidth (-3 dB)	4.5°	4.2°
• Radiation Pattern Compliance (beyond mainbeam)	MIL-STD-188-164A	MIL-STD-188-164A
• Ant Noise Temperature @ 20° EI, midband	57° K	
• G/T with 55° LNB, midband, clear horizon	10.8 dB/° K	
• Axial Ratio (CP only, within pointing cone)	1.21 dB	2 dB
• Feed Port Isolation – TX to RX (dB)	110 (includes optional filter)	100 (includes optional filter)
• Power Handling Capability		1000 watts per port
Ku-Band	Receive	Transmit
• Polarization	Linear orthogonal (optional co-pol)	Linear orthogonal (optional co-pol)
• Frequency Range (GHz)	10.95 - 12.75	13.75-14.50
• Gain (Midband) (dBi)	35.6	37.1
• VSWR	1.30:1	1.30:1
• Beamwidth (-3 dB)	3.0°	2.5°
• Radiation Pattern Compliance (Outside mainbeam)	FCC 25.209, ITU-R S.580-6	FCC 25.209, ITU-R S.580-6, IESS 208
• Ant Noise Temperature @ 20° EI, midband	56° K	
• G/T with 50° LNB, midband, clear horizon	15.4 dB/° K	
• Cross Pol Isolation, on-axis	35 dB	35 dB
• Cross Pol Isolation, off-axis within pointing cone	25 dB Standard MM feed	35 dB
• Feed Port Isolation – TX to RX (dB)	35	80 (includes filter)
• Power Handling Capability		500 watts per port
Ka-Band	Receive	Transmit
• Polarization	Circular (Optional Linear feed avail.)	Circular (Optional Linear feed available)
• Frequency Range (GHz)	20.2 - 21.2 (mil) or 17.7 - 20.2 (comm'l)	30.0 - 31.0 (mil) or 27.5 - 30.0 (comm'l)
• Gain (Midband military) (dBi)	40.4	43.4
• VSWR	1.30:1	1.30:1
• Beamwidth (-3 dB)	1.7°	1.1°
• Radiation Pattern Compliance	FCC 25.209, MIL-STD-188-164A	FCC 25.209, MIL-STD-188-164A
• Ant Noise Temperature @ 20° EI, midband	111° K	
• G/T with 100° LNB, midband, clear horizon	17.0 dB/° K	
• Axial Ratio (CP only, within pointing cone)	1.5 dB	1.0 dB
• Feed Port Isolation – TX to RX (dB)	30	80 (includes filter)
• Power Handling Capability		250 watts

Options

Waveguide interconnect options	FIPS 140-2 Security
85 VAC - 265 VAC Shore Power Optional Supply	
ACS-IST-85 (85 cm), ACS-IST-100 (100 cm) Man Packable Satcoms Terminals – Tri-Band	

AVL Antenna specifically designed for ACS
BUC Electronics powered by ITS Electronics
Modem options by iDirect or Comtech

* frequency, antenna & BUC dependent

*** All specifications subject to change without notice