Agile Milcoms

An ACS Company

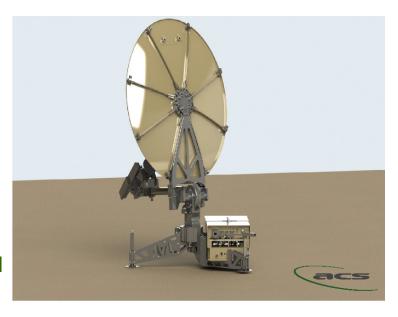
ACS-IST-60 (Integrated Satcom Terminal) Tri-Band: X, Ku and Ka Bands

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-IITM 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-IITM 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 <u>linear Ku-Band</u>, IST with iDirect modem weights less than 40 Lbs. (Including travel case)





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ACS-IST-60 (Integrated Satcom Terminal) Tri-Band: X, Ku and Ka Bands

60 cm - Environmental

Wind

Operational

Without anchoring 25 mph With anchoring 35 mph gusting to 45 mph

Survival (anchored)

Pointing Loss in Wind

X-band Receive, Operational winds Ku-band Receive, Operational winds Ka-band Receive, Operational winds

Temperature Operational Survival

80 mph in zenith (90° elevation) position

0.1 dB typical, 0.3 dB max 0.3 dB typical, 0.7 dB max 0.8 dB typical, 2.0 dB max

-22° to 125°F (-30° to 52°C) -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° El, 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
		· · · · · · · · · · · · · · · · · · ·

VSWR Beamwidth (-3 dB)

Radiation Pattern Compliance Ant Noise Temperature @ 20° El, midband

G/T with 100° LNB, midband, clear horizon

Axial Ratio (CP only, within pointing cone) Feed Port Isolation - TX to RX (dB)

Power Handling Capability

Frequency Range (GHz)

Gain (Midband military) (dBi)

Receive	
Circular (C

Optional Linear feed avail.) 20.2 - 21.2 (mil) or 17.7 - 20.2 (comm'l) 40.4 1.30:1 1.7°

FCC 25.209, MIL-STD-188-164A 111° K

17.0 dB/° K 1.5 dB

30

1.0 dB

43.4

1.1°

1.30:1

80 (includes filter) 250 watts

Options

FIPS 140-2 Security Waveguide interconnect options 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

30.0 - 31.0 (mil) or 27.5 - 30.0 (comm'l)

FCC 25.209, MIL-STD-188-164A

^{*} frequency, antenna & BUC dependent

^{***} All specifications subject to change without notice