



The combat proven SWE-DISH IPT Mil Suitcase satellite system is the most compact and quickest-to-air system on the market today. Easy, one-man operation and exceptional technical performance allow secure 4 Mbps IP broadband transmission, 10 Mbps using the L-band interface, from anywhere. Military units, government agencies and rescue organizations worldwide rely on the IPT Mil Suitcase.

EASY TO USE AND QUICK TO AIR

The IPT Mil Suitcase is deployed for live satellite transmission using a unique point & shoot system. The desired satellite is simply selected from a list and a pointing solution is automatically calculated. Inbuilt GPS receiver, electronic compass and a fully motorized antenna then assures trouble-free antenna pointing. The IPT Mil Suitcase automatically peaks towards the selected satellite and may optionally use an ASCII string from a hub for 100% assured identification.

Parameter set up, monitoring and antenna control is achieved through a web based graphical Man-Machine Interface (MMI) in the browser on your laptop. The laptop is connected to the IPT Mil Suitcase using the same standard LAN port used for IP transmission. The operator needs a minimum of training and no expertise to operate the system, and can concentrate on the task at hand.

IP BROADBAND CAPABILITY

The system allows 4 Mbps duplex transmission of IP standard data, voice and video. With its 10/100 base-T port, the system works as an ordinary LAN for email, FTP, VoIP and data streams. As any standard IP traffic this can be encoded. A serial EIA-530 interface allows military standard communication equipment, e.g. for bulk encryption. An L-band port and Turbo Product Coding is included as standard. The IPT Mil Suitcase is compatible with other base band equipment e.g. different PROMINAs (Multi-service networking products used by DoD) and TDMA systems e.g. iDirect and DVB-RCS.

COMPACT

Measuring just 70x47x31 cm (27.6x18.5x12.2 in) and a total weight of approximately 39 kg (86 lbs) the IPT Mil Suitcase is scarcely bigger than a hand baggage. It can easily be made compatible with the IATA weight and size concept.

RUGGED AND DEPENDABLE

The IPT Mil Suitcase is designed to meet military standards regarding performance, usage and ruggedness. It is fully enclosed in a tough carbon fiber and aluminum carrying case. It is combat proven and have been used during the Iraqi War and the Afghanistan conflict.

KEY FEATURES

- Quick to air - less than five minutes to deploy using point & shoot
- Portable - suitcase size and compatible with the IATA weight and size concept
- IP broadband capable 4 Mbps duplex, 10 Mbps using the L-band interface
- Easy to use - web based MMI, GPS, electronic compass, auto peaking and fully motorized antenna
- LAN standard - ordinary LAN 10/100 base-T interface
- Serial EIA-530 interface for bulk encryption and L-band port
- Combat proven and rugged - meets mil standards



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SPECIFICATIONS: SWE-DISH® IPT MIL SUITCASE

ANTENNA PERFORMANCE

Antenna Type	Gregorian offset segmented into four pieces
Sidelobe performance	29-25 log θ dBi in azimuth
Antenna Aperture	0.90 x 0.66m (35.4 x 26.0 in)
Polarization	Linear
Rx Frequency	10.95–12.75 GHz.
G/T	19.3 dB/K @ 11.0 GHz 20° elevation
Tx Frequency	13.75-14.5 GHz
EIRP Capability	Up to 54 dBW
Antenna Positioning	Motorized positioning through GPS, electronic compass and inclinometer
Azimuth Range	$\pm 30^\circ$ in 0.1° steps
Elevation Range	5°-90° in 0.1° steps
Polarization Range	190° (-30° to 160°) in 0.1° steps
Transmit gain at midband	38.4 dBi
Receive gain at midband	38.2 dBi
3dB beamwidth in azimuth	1.53° @ 14.25 GHz
First sidelobe level in azimuth	-21 dB @ 2.4° relative to mainlobe peak
Polarization performance	XPD > 30 dB within 1 dB cone
Beam deflection at 22mph	<0.1° in azimuth
Beam deflection at 45mph	<0.4° in azimuth

OPERATIONAL CONDITIONS

Operational Temperature	-30°C to +50° C (-22°F to +122°F)
Operational Humidity	95% non-condensing
Operational Wind Speed	Max 10 m/s (22.4 mph), anchored unit
Operational Altitude	Max 3,000 m (9,850 ft)
Rainfall	Max 100 mm (4 in) rain per hour
Storage Temperature	-40°C to +70°C (-40°F to +158°F)
Sealing Class	IP65, including Power Supply Unit
Deployment and Set-up	< 5 minutes

MECHANICS

Physical Size	70x47x31 cm (27.6x18.5x12.2 in) when stowed for transportation
Weight	Approximately 39 kg (86 lb) depending on options. IATA compatible

POWER SUPPLY UNIT

AC Supply	100-240 V, AC 50-400 Hz, 750 W
DC Supply	21-32 V DC, 750 W
Output	26 V DC, max 27 A

ENVIRONMENTAL STANDARDS & TEST

IEC 68-2-14	Change of temperature, -40°C to +70°C (-40°F to 158°F)
IEC 60068-2-64 Fdb	Random vibration broadband
IEC 60068-2-27 Ea	Shock
IEC 60068-2-29 Eb	Bump
IEC 60068-2-31 Ec	Drop and topple

IEC 60068-2-32 Ed

IEC 60-2-52

IEC 60068-2-68

Continuous Operation

Type Approvals

Free fall

Salt mist

Sand and dust

>10,000 antenna and polarization motion cycles during 15 days continuous operation

FCC license (E030197), Eutelsat (EA-V042), Intelsat (IA097AA0), EuropeStar (ES-ME-39), Hispasat (HIS-ET-96221-10026-SWE) IPStar, Shin Satellite and AsiaSat

INTERFACES, TRANSMIT, RECEIVE AND CODING MODES

TCP/IP LAN

10/100 base-T. MIL-C-26482 series 1 connector IP gateway for applications like video streaming, Internet connection, E-mail (SMTP/POP) and ftp file transfer

Serial Data Interface

EIA-530. Possible to connect external data communication equipment

L-band interface

Included

Transmit Modes

SCPC

Modulation

BPSK, QPSK, OQPSK and 8PSK

Coding

Viterbi and TPC @ rate 1/2, 3/4, 7/8

Built-in TCP Accelerator

Trellis @ rate 2/3

SSPA AND LNB PERFORMANCE

SSPA extended Ku-Band 13.75-14.50 GHz

Output Power Psat / P1dB: 45.5/44.5 dBW (35/28W)

Gain Flatness ± 1.0 dB full band

Gain Slope +0.3 dB per 40 MHz

Gain Variation ± 1.0 dB at -40°C to +55°C (-40°F to + 131°F)

Gain Adjustment 10 dB, 0.1 dB resolution

	LNB1*	LNB2	LNB3
RF Frequency	10.95-11.70 GHz	11.70-12.20 GHz	12.25-12.75 GHz
IF Frequency	950-1.700 MHz	950-1.450 MHz	950-1.450 MHz
Local Frequency	10.00 GHz	10.75 GHz	11.30 GHz

*Three different LNBs are delivered as standard together with the military IPT Mil Suitcases. LNB1 is mounted as standard from factory. It is easy to change LNBs in the field.

Local Stability

± 3 ppm

Noise Figure

0.8 dB typical at 25° C (77° F)

Conversion Gain

60 dB typical at 25° C (77° F)

Conversion Gain Variation

Max 2dB in any 50 MHz segment over the frequency band

COMPATIBILITY (NOT EXHAUSTIVE)

Cryptos

KIV-7, KIV-19, KG-175, BID-2080

Other

Base band equipment e.g. Different PROMINAs and TDMA systems e.g iDirect and DVB-RCS