



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

<b>ANTENNA PERFORMANCE</b>		IEC 60068-2-68	Sand and dust
Antenna Type	Gregorian offset segmented into four pieces	Continuous Operation	>10,000 antenna and polarization motion cycles during 15 days continuous operation
Sidelobe performance	29-25 log $\theta$ dBi in azimuth	Type Approvals	FCC license (E030197), Eutelsat (EA-V042), Intelsat (IA097AA0), EuropeStar (ES-ME-39), Hispasat (HIS-ET-96221-10026-SWE) IPStar, Shin Satellite and AsiaSat
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	<b>INTERFACES, TRANSMIT, RECEIVE AND CODING MODES</b>	
Azimuth Range	$\pm 30^\circ$ in 0.1° steps	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
Elevation Range	5°-90° in 0.1° steps	Serial Data Interface	EIA-530. Possible to connect external data communication equipment
Polarization Range	190° (-30° to 160°) in 0.1° steps	L-band interface	Included
Transmit gain at midband	38.4 dBi	Transmit Modes	SCPC
Receive gain at midband	38.2 dBi	Modulation	BPSK, QPSK, OQPSK and 8PSK
3dB beamwidth in azimuth	1.53° @ 14.25 GHz	Coding	Viterbi and TPC @ rate 1/2, 3/4, 7/8 Trellis @ rate 2/3
First sidelobe level	-21 dB @ 2.4° relative to mainlobe peak in azimuth	Built-in TCP Accelerator	
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		
<b>OPERATIONAL CONDITIONS</b>		<b>SSPA AND LNB PERFORMANCE</b>	
Operational Temperature	-30°C to +50° C (-22°F to +122°F)	SSPA extended Ku-Band	13.75-14.50 GHz
Operational Humidity	95% non-condensing	Output Power	Psat / P1dB: 45.5/44.5 dBW (35/28W)
Operational Wind Speed	Max 10 m/s (22.4 mph), anchored unit	Gain Flatness	$\pm 1.0$ dB full band
Operational Altitude	Max 3,000 m (9,850 ft)	Gain Slope	+0.3 dB per 40 MHz
Rainfall	Max 100 mm (4 in) rain per hour	Gain Variation	$\pm 1.0$ dB at -30°C to +50°C (-22°F to + 122°F)
Storage Temperature	-40°C to +70°C (-40°F to +158°F)	Gain Adjustment	10 dB, 0.1 dB resolution
Sealing Class	IP65, including Power Supply Unit		
Deployment and Set-up	< 5 minutes		
<b>MECHANICS</b>			
Physical Size	70x47x31 cm (27.6x18.5x12.2 in) when stowed for transportation		
Weight	Approximately 39 kg (86 lb) depending on options. IATA compatible		
<b>POWER SUPPLY UNIT</b>			
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		
<b>ENVIRONMENTAL STANDARDS &amp; TEST</b>			
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	Free fall		
IEC 60-2-52	Salt mist		
		RF Frequency	LNB1*      LNB2      LNB3 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	$\pm 3$ 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
		<b>COMPATIBILITY (NOT EXHAUSTIVE)</b>	
		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

Specifications are subject to change without notice, and this datasheet will not form part of any contract.