SWE-DISH®
IPT SUITCASE

The SWE-DISH® IPT Suitcase satellite system is the world's most compact and quickest-to-air satellite system. It combines easy, one-person operation with exceptional technical performance to allow live, 4 Mbps IP broadband transmission, 10 Mbps using the L-band interface, from virtually anywhere in the world. Broadcasters, military units, government agencies and rescue organizations worldwide rely on the IPT Suitcase for communications.

EASY-TO-USE AND QUICK-TO-AIR

The IPT Suitcase is deployed for live satellite transmission in less than 5 minutes using a unique point & shoot system. The desired satellite is simply selected from a list, and a pointing solution is automatically calculated. In-built GPS receiver, electronic compass and a fully motorized antenna then assures trouble-free antenna pointing. The IPT 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 achived through a web based Graphical User Interface (GUI) in the browser on your laptop. The operator needs a minimum of training and no expertise to operate the system, and can therefor concentrate on the task at hand.

BROADCAST QUALITY AND IP BROADBAND

The system allows 4 Mbps duplex transmission of IP standard data, voice and video. Using MPEG2 video encoding the IPT Suitcase provides broadcast picture quality. With its 10/100 base-T port, the system works as an ordinary LAN for email, FTP, VoIP and data streams. An L-band port and Turbo Product Coding is included as standard.

COMPACT

The IPT Suitcase is scarcely bigger than a cabin baggage and can easily be made compatible with the IATA weight and size concept. A total weight of approximately 39 kg (86 lbs) allows one-person handling. The IPT Suitcase runs either on 24 V DC, or on a wide range of both AC and DC inputs via a stand-alone power supply unit.

RUGGED AND DEPENDABLE

The IPT Suitcase is fully enclosed in a tough carbon fiber and aluminum carry case. It has operated in the hot,dusty desert of the Middle East; in the humid heat of Equatorial Africa; been up Mount Everest; and transmitted under arctic conditions from Northern Sweden. It is rugged enough for the toughest assignments.

KEY FEATURES

- Quick to air - less than five minutes to deploy using point & shoot
- Portable - suitcase size and optionally compatible with the IATA weight and size concept
- IP Broadband capable 4 Mbps
- L-band port included, broadband capable 10 Mbps
- Easy to use - web based GUI, GPS, electronic compass, auto peaking, point & shoot and fully motorized antenna
- LAN standard - working like any LAN through 10/100 base-T interface
- Rugged - used by military units worldwide

AUGUST 2006, Suitcase 2.3, Version 1:1

SPECIFICATIONS: SWE-DISH® IPT 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 0.66 m (35.4 x 26.0 in)
Polarization	Linear
Rx Frequency, options	LNB1 10.95–11.70 GHz LNB2 11.70–12.20 GHz LNB3 12.25–12.75 GHz
G/T	19.3 dB/K @ 11.0 GHz 20º 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	±30º in 0.1º steps
Elevation Range	5º-90º in 0.1º steps
Polarization Range	190º (-30º to 160º) in 0.1º steps
Deployment and Set-up	Less than 5 minutes
Video/Audio Input and Processing	Depending on used encoder
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
L-band Interface	Included

OPERATIONAL CONDITIONS

Operational Temperature	-20ºC to +40º C (-4ºF to +104ºF)
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	-40ºC to +70ºC (-40ºF to +158ºF)
Sealing Class	IP54, including Power Supply Unit

MECHANICS

Physical Size	70x47x31 cm (27.6x18.5x12.2 in) when stowed for transportation
Weight	Approximately 39 kg (86 lb) depending on options. Compatible with the IATA weight and size concept.

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, -40ºC to +70ºC (-40ºF to 158ºF)
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
IEC 60068-2-68	Sand and dust
Continuous Operation	>10.000 antenna and polarization motion cycles during 15 days continuous operation
Approvals	FCC license (E030197), Eutelsat (EA-V042), Intelsat (IA097AA0), EuropeStar (ES-ME-39), Hispasat (HIS-ET-96221-10026-SWE) IPStar, Shin Satellite and AsiaSat

TRANSMIT, RECEIVE AND CODING MODES

Transmit Modes	SCPC
Modulation	BPSK, QPSK, OQPSK and 8PSK
Coding	Viterbi and TPC @ rate 1/2, 3/4, 7/8 Trellis @ rate 2/3
Built-in TCP Accelerator	

SSPA PERFORMANCE

SSPA Extended Ku-Band	13.75-14.50 GHz
Output Power	Psat / P1dB: 45.5/44.5 dBm (35/28 W)
Gain	Min 45 dB
Gain Flatness	±1.0 dB full band
Gain Slope	+0.3 dB per 40 MHz
Gain Variation	±1.0 dB at -40ºC to +55ºC (-40ºF to + 131ºF)
Gain Adjustment	10 dB, 0.1 dB resolution
Intermodulation Distortion	-25 dB at 3 dB back off relative to P1dB
Spurious	-70 dBc at rated P1dB
Harmonics	-50 dBc at rated P1dB-3dB

SUITCASE VERSIONS

The IPT Suitcase is available in a military version, the IPT Mil Suitcase (AN/USC-68). This has higher environmental protection (IP65), additional interface (EIA-530), higher temperature range, as well as other modifications.

There is also the DVB Suitcase, with L-band input, but without in-built IP functionality. It is lower cost and is targeting broadcasters that does not run SNG over IP.

SWE-DISH SATELLITE SYSTEMS AB
TORGGATAN 15, P.O. BOX 6075
S-171 06 SOLNA SWEDEN
P +46 8 728 50 00 F +46 8 728 50 50
SALES@SWE-DISH.SE
WWW.SWE-DISH.COM

SWE-DISH SATELLITE SYSTEMS INC
12343 SUNRISE VALLEY DRIVE, SUITE D
RESTON, VA 20191 US
P +1 703 476 1826 F +1 703 476 5423
US-SALES@SWE-DISH.COM
WWW.SWE-DISH.COM

SWE-DISH SATELLITE SYSTEMS ASIA LTD
SUITE 20/F, 9 QUEENS ROAD CENTRAL
CENTRAL HONG KONG SAR
P + 852 3189 7020 F +852 3189 7689
SALES@SWE-DISH.COM
WWW.SWE-DISH.COM

SWE-DISH SATELLITE SYSTEMS MIDDLE EAST
LA-3, JEBEL ALI FREE ZONE, P.O. BOX 17856
DUBAI - UNITED ARAB EMIRATES
P +971 4 8830 600 F +971 8830 601
SALES@SWE-DISH.COM
WWW.SWE-DISH.COM