



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, 2 Mbps broadband transmission from virtually anywhere in the world. Broadcasters, military units, government agencies and rescue organizations 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. All set up, monitoring and antenna control is done through a web based Graphical User Interface (GUI) in the browser on your laptop. 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 operator needs a minimum of training and no expertise to operate the system, and can concentrate on the task at hand.

BROADCAST QUALITY AND IP BROADBAND

The system allows 2 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 is optional.

COMPACT

Measuring just 70x47x31 cm (27.6x18.5x12.2 in) the IPT Suitcase is scarcely bigger than a hand baggage. A 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
- Portable - suitcase size and approximately 39 kg (86 lbs)
- Broadband quality - 2 Mbps duplex
- L-band port included
- Easy to use - web based GUI, GPS, electronic compass, and fully motorized antenna
- LAN standard - working like any LAN through 10/100 base-T interface
- Rugged - used by military units worldwide

JANUARY 2004 VERSION 1.3

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 20° elevation
Tx Frequency	13.75-14.5 GHz
EIRP	Up to 51.7 dBW at -1 dB
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	180° (-30° to 150°) in 0.1° 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	-20°C to +40° C (-4°F to +104°F)
Operational Humidity	95% non-condensing
Operational Wind Speed	Max 10 m/s (22 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	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

POWER SUPPLY UNIT

AC Supply	90-264 V AC, 44-440 Hz, 750 W
DC Supply	23-32 V DC, 750 W

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	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	Eutelsat, Intelsat, FCC (pending)

TRANSMIT, RECEIVE AND CODING MODES

Transmit Mode	SCPC
BPSK	Rate 1/2: 64 to 1 024 Kbps
QPSK, OQPSK	Rate 1/2: 64 to 2 048 Kbps
QPSK, OQPSK	Rate 3/4: 64 to 2 048 Kbps
QPSK, OQPSK	Rate 7/8: 64 to 2 048 Kbps
Code Types	Viterbi FEC, RS



SSPA AND LNB PERFORMANCE

SSPA Extended Ku-Band	13.75-14.50 GHz
Output Power	Psat / P1dB: 44.0/43.0 (25/20) dBm (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 -40°C to +55°C (-40°F to + 131°F)
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
Noise Figure	8 dB at max gain

IPT SUITCASE VERSIONS

The IPT Suitcase is also available in a military version. This has higher environmental protection (IP65), additional interface (EIA-530), higher temperature range, extra LNB's for full Rx range from 10,95-12,75 GHz as well as other modifications.

Specifications are subject to change without notice