



The SWE-DISH® DVB Suitcase satellite system compresses the functionality of a fly-away system into the world's most compact and quickest-to-air satellite package. The DVB Suitcase fully supports existing digital video broadcasting (DVB) infrastructure at rates up to 10 Mbps. It is future proof and can be upgraded to the IPT Suitcase, giving it built-in broadband IP transmit and receive functionality.

#### **EASY-TO-USE AND QUICK-TO-AIR**

The DVB 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. This is run in the browser on your laptop without need for extra software. The desired satellite is simply selected from a list, and a pointing solution is automatically calculated. Built-in GPS receiver, electronic compass and a fully motorized antenna 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.

#### **DVB BROADCAST READY**

The system allows up to 10 Mbps DVB transmission. A recommended SWE-DISH small sized DVB electronics flight case is available as an option, alternatively existing equipment can be used. The electronics flight case connects to the DVB Suitcase's L-band input.

#### **COMPACT**

The DVB Suitcase is scarcely bigger than a hand baggage. It measures a compact 70x47x31 cm (27.6x18.5x12.2 in). A weight of approximately 38 kg (84 lbs) allows one-person handling. The DVB 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 DVB Suitcase is fully enclosed in a tough carbon fiber and aluminum carry case. It is a design that 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

- Compact and portable - The functionality of a fly-away compressed to suitcase size and approx. 38 kg (84 lbs)
- DVB centric - use existing DVB equipment
- High performance - Up to 10 Mbps
- Easy to use - web based GUI, GPS, electronic compass, and fully motorized antenna
- Quick to air - less than five minutes to deploy
- Future proof - can be upgraded with inbuilt broadband IP functionality to the IPT Suitcase

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## SPECIFICATIONS: SWE-DISH® DVB SUITCASE

### ANTENNA PERFORMANCE

Antenna Type	Gregorian offset segmented into four pieces
Sidelobe Performance	29-25 log $\theta$ 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 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
Deployment and Set-up	Less than 5 minutes
L-band Interface	Video/Audio Input and processing depending on used encoder

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



### 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 38 kg (84 lb). 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, -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

### 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	Min 45 dB
Gain Flatness	$\pm 1.0$ dB full band
Gain Slope	+0.3 dB per 40 MHz
Gain Variation	$\pm 1.0$ 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

### THE SUITCASE FAMILY

The Suitcase is also available in an IP broadband version (the IPT Suitcase) and a military version (the IPT Mil Suitcase). The IPT Suitcase has built-in IP transmit and receive functionality and works as any broadband LAN through its 10/100 base-T interface. The IPT Mil Suitcase has higher environmental protection (IP65), a additional serial 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, and this datasheet will not form part of any contract.