

SWE-DISH® FA150K TWO-IN-ONE CONCEPT



A mission often evolves in unpredictable ways: changes in the duration of stay, increased bandwidth demand over time or the need for rapid regrouping on a sudden notice.

This calls for a flexible way of being able to quickly and cost efficiently adjust to changes in the environmental conditions and needs, including means of transportation.

The SWE-DISH Satellite Systems, TWO-IN-ONE concept, offers the user a mission configurable solution that is cost effective, and the tools necessary to accommodate these unpredictable changes, regardless whether you are on a broadcast, government or military mission.

TWO IN ONE

By combining some of the most compact and versatile SWE-DISH products in a smart way, the IPT Suitcase, the market's quickest-to-air and easy-to-use system, and the FA150K Lite, gives your mission the flexible communication solution you need. At a cost less than investing in two separate systems - all packed into airline checkable transport cases (IATA). This solution gives more flexibility to your satellite communication solution.

EASE OF USE AND DEPLOYMENT

The FA150K Lite is assembled and dissembled in just a few minutes, requiring no tools. Once the FA150K antenna has been deployed, the IPT Suitcase may be connected. After alignment of the FA150K antenna, the pointing solution is easily retrieved from the IPT Suitcase and the configuration is up and running. The FA150K antenna provides a 5 dB better link margin than the IPT Suitcase antenna, which directly translates into increased bandwidth - at just a fractional cost compared to adding a second satellite terminal to the fleet.

KEY FEATURES

- Flexible and cost effective maximum operational flexibility
- Combat proven Rugged and durable construction
- High performing antenna Gregorian offset and carbon fiber
- Airline checkable Designed for easy transportation and IATA weight concept
- Flexibility Optional use IPT Suitcase as a light, compact and fully integrated HPA and base-band package
- · Quick-to-air no tools required

SPECIFICATIONS: SWE-DISH® FA150K TWO-IN-ONE

ANTENNA PERFORMANCE - FA150K LITE

Antenna model SWE-DISH 150K EDF

Antenna concept Gregorian type dual optics. Elliptical

4-piece main reflector in carbon fiber with size 1.5x1.35 m (59.1x53.1 in), folding feed arm and sub reflector

Side lobe performance 29-25 Log θ dBi

Polarization Linear orthogonal, < 1° accuracy

Polarization performance XPD > 35 dB

TRANSMIT PERFORMANCE

Transmit frequency 13.75 - 14.5 GHz
Transmit gain, FA150K 45.0 dBi at mid-band
Transmit gain, Suitcase 38.4 dBi at mid-band

RECEIVE PERFORMANCE

Receive frequency 10.95 - 12.75 GHz (Suitcase)
Receive gain, FA150K 43.2 dBi at mid-band
Receive gain, Suitcase 38.2 dBi at mid-band

G/T with FA150K 23 dB/K at 20° elevation and 20°C

(68°F), clear sky

G/T with Suitcase 19.3 dB/K at 20° elevation and 20°C

(68°F), clear sky

EIRP CAPABILITY

EIRP Capability, with Up to 59 dBW

FA150K antenna

EIRP Capability, Suitcase Up to 54 dBW

stand-alone

ANTENNA TRAVEL RANGE - FA150K LITE

Azimuth range Manual coarse: ±360°

Turnbuckles mounted: ±25° coarse,

±10°fine

Elevation range 0-90°

PLATFORM LEVELING - FA150K LITE

Pitch and roll Built in compensation for pitch and roll by using platform independent

reference to true vertical/horizontal

ENVIRONMENTAL PERFORMANCE

Ambient temperature Operational: -20°C to +40°C

(-4°F to +104°F) Storage: -40°C to + 70°C (-40°F to +158°F)

Solar radiation Operational up to 1,200 W/m²
Wind speed Operational up to 20m/s (44 mph),

windstays mounted

Operating humidity 95% non-condensing
Rainfall Maximum 100 mm/h (4 in/h)
Sealing IPT Suitcase sealed to IP54
Altitude Operational: Up to 3,000 m (9

Operational: Up to 3,000 m (9,850 ft) Survival: Up to 10,000 m (32,800 ft)

ANTENNA FEATURES - FA150K LITE

· Azimuth: Coarse and precision fine adjustment

 \bullet Elevation: Generally 0° - 90° with fine adjustment

Polarization: +/-100°, 1° accuracy, motorized
True Elevationmeter with 0.1° resolutions

SatViewer signal analyzer for easy, precise antenna

 Satviewer signal analyzer for easy, precise antenna alignment incl cross polar rejection & satellite ID

ANTENNA OPTIONS

• 3 port feed for co-polar operation

· HPA flight cases

· Base-band flight cases

Detachable rear antenna support for installation at places with

| installation are constant of the const

limited space (OB Van camera platform)

 The FA150K Lite can be delivered as an option to the FA150K Fly-Away antenna



MECHANICAL

Weight - FA150K Lite 56 kg (123.4 lbs)
Weight - IPT Suitcase 39 kg (86 lbs)

APPROVALS & COMPLIANCE

FA150K Lite Eutelsat/Intelsat compliant,

station approvals,

FCC license E980294

IPT Suitcase FCC license E030197

Eutelsat EA-V042 Intelsat IA097AA0 EuropeStar ES-ME-39

Hispasat HIS-ET-96221-10026-SWE

IPStar, ref no 05/001 AsiaSat TO8/26-10-05/001

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

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SWE-DISH SATELLITE SYSTEMS MIDDLE EAST