

SWE-DISH® FA150K FLY-AWAY



The proven SWE-DISH FA150K Fly-Away system is designed from the bottom up to be a rugged, easy to transport and quick to deploy satellite earth terminal. The lightweight antenna design is optimized to keep package size down and efficiency up, without compromising strength and durability. The sturdy construction makes it suitable for fast deployment.

SMART PACKAGING

The rugged cage has integrated wheels and can be used as a trolley, with the electronics flight cases stacked on top. The integrated skid plate is used for the same purpose on softer ground like grass, sand, mud or snow. Every transported pound is used to create a stable antenna platform, leaving no empty crates or lids lying around after deployment. The antenna sits close to the ground for increased wind stability.

QUICK DEPLOYMENT

Deployment and assembly of the antenna requires no tools, and can be done "gloves on" under severe environmental conditions. The FA150K is quickly deployed, and the satellite can be acquired in less than 10 min. Packing down is equally fast. The integrated True Elevation Meter, and a battery-operated Satellite Analyzer, make antenna pointing fast, easy and accurate. The FA150K has been granted a patent for smart transformation from transportation to operation.

HIGH PERFORMING ANTENNA

The high performing elliptical 1.5 m (59 in) Gregorian offset antenna is the heart of the FA150K. It consists of a four piece segmented carbon fiber reflector, for easy stowing and low weight. The dual optics Gregorian antenna concept allows a small antenna size, combined with the exceptionally good efficiency, low side lobes and good cross polarization/axial ratio performance.

EASE OF USE

Transportation is easy. Assembly is straight forward. Easy Control & Monitoring (ECM) unit helps the notso-well-trained operator to configure the system - to set up the MPEG 2 encoder, configure the modulator, select pre-set frequency and power level, followed by step-by-step support during line up towards the satellite. The FA150K is a tried and true earth terminal design. It is in use worldwide, often under the most demanding conditions.

KEY FEATURES

- Quick deployment Satellite acquisition in less than 10 minutes, also with gloves on
- Rugged and durable construction Combat proven
- · High performing antenna Gregorian offset and carbon fiber
- Smart packaging Designed for easy transportation on hard and soft surfaces, using skid plate and wheels

SPECIFICATIONS: SWE-DISH® FA150K FLY-AWAY SYSTEM

ANTENNA PERFORMANCE

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),	ANTEININA FEAT
Side lobe performance		Azimum Coar Elevation: Gen
Polarization	Linear orthogonal $< 1^{\circ}$ accuracy	Polarization: +
Polarization performance	XPD \35 dB	• True Elevation
1 olanzation ponormanoo		SatViewer sign
TRANSMIT PERFORMANCE		alignment incl o
Transmit frequency	 13.75 - 14.5 GHz	ung mierte mer e
Transmit gain at mid-band	45.0 dBi	ANTENNA OPTI
-		 Military X band
RECIEVE PERFORMANCE		Transmit frequ
Receive frequency	10.7 - 12.75 GHz	• 3 port feed for
Receive gain at mid-band	l 43.2 dBi	• HPA 1:1 redur
G/T	23 dB/K at 20° elevation and 20°C	Super stable L
	(68°F), clear sky	data rate appli
		Detachable real
HPA/EIRP CAPABILITY		space (OB Var
Typical HPA rating	125W to 400W TWTA for DSNG,	
DSNG EIRP capability	8-16W transceiver for datacom	
	52 dBW to 55 dBW datacom	
ANTENNA TRAVEL RANG	E	
Azimuth range	– Manual coarse: ±360°	
0	Turnbuckles mounted: ±25° coarse,	
	±10°fine	Q.
Elevation range	0-90°	
PLATFORM LEVELING		
Pitch and roll	Built in compensation for pitch and	Stowed SW/F_D
	reference to true vertical/horizontal	FA150K Fly-Av
ENVIRONMENTAL PERF	ORMANCE	
Ambient temperature	Operational: -20°C to +55°C	MECHANICAL
	(-4°F to +131°F)	Typical system
	Storage: -40°C to + 70°C	
	(-40°F to +158°F)	Weight
Solar radiation	Operational up to 1,200 W/m ²	
Wind speed	Operational up to 20m/s (44 mph),	
	windstays mounted	
Operating humidity	Up to 100% condensing	
Rainfall	Maximum 100 mm/h (4 in/h), excluding	Dimensions
Sealing	All flight cases are sealed to IP65	Dimensione
ocalling	during transport and storage	
Altitude	Operational: Up to 3,000 m (9,850 ft)	APPROVALS &
	Survival: Up to 10,000 m (32,800 ft)	 Eutelsat/Intels
		• FCC license E

Material/construction

Carbon fiber antenna components. stainless steel antenna platform/cage, miscellaneous aluminum parts (anodized)

ENNA FEATURES

- imuth: Coarse and precision fine adjustment
- evation: Generally 0° 90° with fine adjustment
- larization: +/-100°, 1° accuracy, motorized
- e Elevation meter with 0.1° resolutions
- tViewer signal analyzer for easy, precise antenna nment incl cross polar rejection & satellite ID

ENNA OPTIONS

- itary X band operation including Step Tracking
- ansmit frequency coverage from 12.75 GHz
- port feed for co-polar operation
- A 1:1 redundancy or phase combined systems
- per stable LNA/BDC (PLL) receive concept for low a rate applications
- tachable rear cage part for installation at places with limited ace (OB Van camera platform)



150K Fly-Away

HANICAL

ROVALS & COMPLIANCE

telsat/Intelsat compliant, station approvals

C license E980294

Specifications are subject to change without notice

Three cases (antenna cage, RF case

FA150K antenna with Ku-band feed

chain, PLL LNBs and accessories:

RF case typically 27,5 kg (60.6 lbs) ACU case typically 38 kg (83.8 lb) HPA case typically 28 kg (61.7 lbs) FA150K stowed 120x76x53 cm

and electronic case)

100 kg (220.5 lbs)

(47.2x29.9x20.9 in)

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