



## Quick Deploy Fly-Away Antenna *INTREPID* Class



- High Gain Carbon Fiber Reflector or SMC option
- Auto-Pointing IPPOINT™ Controller
- Can be Operated by Anyone
- Deploy and Acquire in <5 minutes
- No Assembly Tools Required

### FEATURES:

- Simple Operation – Requires no Satellite Communication Expertise
- Acquires the satellite within minutes
- Completely automatic one button acquisition of required satellite
- Low cost, high performance and reliable satellite acquisition
- Ultra-Compact
- 4 Flight Case IATA Compliant (Carbon Reflector Option)

The *INTREPID120*™ antenna system from Advantech is renowned for its compact size, light weight and powerful performance which has been designed to excel in today's increasingly demanding DSNG market place.

The user friendly modular design of the *INTREPID120*™ antenna allows for simple, fast and accurate location and acquisition of the satellite, either as a manually controlled mount or as a fully auto-pointing and motorised system, there are no tools required to assemble the *INTREPID120*™.

The novel light weight and sturdy tri-pod design includes a truly versatile amplifier cradle which can accommodate up to 125KW Ku-Band SSPB, neatly doing away with the long lengths of fragile flexible wave-guide normally associated with flyaway systems.

The main reflector is manufactured from high quality carbon fibre and is supplied in six easily assembled petals that employ a spherical dowel locking mechanism to ensure perfect alignment. For cost effective VSAT operation there is the optional 1.2M two piece reflector or the single piece 90cm reflector.

Quick Deploy Antenna – *INTREPID* Class with IPPOINT™



## Antenna Specification

### Antenna Performance

Antenna	Optional Reflectors :
	6 Segment, 1.2m carbon fibre reflector
	2 Piece, 1.2m carbon fibre reflector
	Single Piece, 90cm SMC reflector

Side Lobe Performance	29-25 Log $\theta$ dBi
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Polarisation Performance	XPD >35 dB
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Transmit Frequency	13.75 to 14.5 GHz
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Receive Frequency	10.95 to 12.75 GHz
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	<b>1.2M</b>	<b>90cm</b>
Transmit Gain (Mid Band)	43.5 dBi	40 dBi
Receive Gain (Mid Band)	42 dBi	38.3dBi

### System Performance

Azimuth Range Manual/Coarse	$\pm 360^\circ$ /Fine: $\pm 90^\circ$
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Elevation Range	5-90°
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Polarisation	$\pm 95^\circ$
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Levelling	Independent levelling feet, with optical inclinometer and site level.
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Ambient Temperature Operational	-30°C to +55°C
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Storage	-40°C to +70°C
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Solar Radiation	1,200 W/m <sup>2</sup>
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Wind Speed Max. Operational (with ballast or anchors)	20m/s (45 mph)
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Operating Humidity	100% condensing
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Rainfall Maximum	100 mm/h (4 in/h), excluding link budget effects
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Sealing	All flight cases are sealed to IP65 during transport and storage
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Altitude (during transport and storage)	Up to 3,000 m (9,850 ft)
Survival	Up to 10,000 m (32,800 ft)

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## **IPOINT™ SPECIFICATIONS**

Operational modes	Auto-acquire	Unstow	Stow	Configure
LNB Power supply	Can provide 13/18VDC switchable at up to 600mA on RF cable to power LNB and diseq tones.			
RF Signal Input	L-band signal from LNB Level -70 to -20 dBm			
Display	2 line LCD display giving Mode, Signal Level Indication and Position Information			
Motor Drive	Can drive all motors at 24VDC up to 12A. Pulse width modulation from 10% to 100%.			
Limit Switches	Stow Azimuth and Elevation switches			

## **OPTIONS**

Hand Held Controller	Hand Held Controller with LCD display
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## **PHYSICAL**

Temperature Range	-20°C to 55°C - Operating -30°C to 85°C - Non Operating (storage)
Humidity	5% to 95% RH non condensing - Operating 0% to 99% RH non condensing - Non Operating (storage)
Altitude	10,000 feet max
Input Power	110 or 230V, single phase, 50/60Hz, 500W
Dimensions	Antenna mounted controller 10.8" (275mm) x 10.3" (262mm) x 2.7" (69mm) Rack mounted Control panel containing PSU: 19" (483mm) x 1.75" (44mm) x 16"(406mm)
Mounting	Antenna mounted controller: Antenna specific mounting brackets Rack mounted Control panel containing PSU: Standard 1U rack mount

## **STANDARDS**

Designed to meet	EN55022 and EN50082-1
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An ISO9001 2000 Company



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