Quick Deploy Fly-Away Antenna
Ku-Band INTREPID Class

Intrepid Class with IPOINT™

Features

- High Gain Carbon Fiber Reflector
- Auto-Pointing ***IPOINT***™ Controller
- Can be Operated by Anyone
- Deploy and Acquire in <5 minutes
- No Assembly Tools Required
- 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
- Supplied in 4 Airline Checkable Flight Cases

Overview

The ***INTREPID*120**™ antenna system from Advantech Wireless is renowned for its compact size, light weight and powerful performance which has been designed to excel in today's increasingly demanding fly-away market.

The user friendly modular design of the ***INTREPID*120**™ antenna system allows for simple, fast and accurate location and acquisition of the target satellite, either as a manually controlled mount or as a fully auto-pointing and motorised system with the integrated ***IPOINT***™ antenna control unit.

There are no tools required to assemble the ***INTREPID*120**™. The main reflector is manufactured from high quality carbon fibre and is supplied in six easily assembled petals that employ a revolutionary spherical dowel locking mechanism to ensure perfect alignment. An integrated HPA cradle can be supplied neatly accommodating amplifiers up to15kg.

Also available for X-band.

Quick Deploy Fly-Away Antenna INTREPID Class

Antenna Specifications

Antenna	
Antenna	6 segment 1.2m carbon fibre prime focus offset feed reflector
Side Lobe Performance	29-25 Log θ dBi
Polarisation Performance	XPD >35 dB Transmit & Receive on peak
Feed Port Isolation	Transmit band 40dB (excluding filter) Receive band 35dB
Polarisation	Linear Orthoganal
Transmit Frequency	13.75 to 14.5 GHz
Receive Frequency	10.7 to 12.75 GHz
Transmit Gain (Mid Band)	43.5 dBi
Receive Gain (Mid Band)	42 dBi
Noise Temperature	42K at 20° Elevation
Azimuth Range	± 100°
Elevation Range	5-90°
Polarisation	± 95°
Levelling	Independent levelling feet
Environment	
Ambient Temperature	Operational : -30°C to +55°C Storage: -40°C to +85°C
Solar Radiation	1,200 W/m2
Wind Speed Max. (with ballast or anchors)	Operational : 20m/s (45 mph) Survivable: 29m/s (65 mph) Pointing loss : 2dB at 20 m/s (45 mph)
Operating Humidity	100% condensing
Rainfall Maximum	100 mm/h (4 in/h), excluding link budget effects
Sealing	All flight cases are sealed to IP65 during transport and storage
Altitude (during transport and storage)	Up to 3,000 m (9,850 ft)
Survival	Up to 10,000 m (32,800 ft)
Input Power	110 to 240V, single phase, 50/60Hz, 500W

IPOINT™ Specifications

Operation	
Single button press geosynchronous satellite auto-acquisition.	
Supports Goto Satellite, Jog, Stow/Unstow modes. Inclined Satellite tracking option available.	
Self-contained DVB-S tuner or options for external Beacon Receiver/Modem for satellite identification.	
User Interface	
Display	2 line LCD located in 1U 19” User Interface Unit providing control via menu system.
Ethernet	10/100Base-TX supporting Command Line Interface and M&C communications.
RS-232	Supporting Command Line Interface and M&C communications.
Graphical User Interface	RCM Windows program to Monitor & Control iPoint over serial or Ethernet connections.
User GUI	Windows/Linux/Symbian Graphical User Interface to Monitor & Control iPoint over Ethernet.
Physical Interface	
LNB Power supply	Provides switchable 13/18VDC 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
Motor Drive	Can drive all motors at 24VDC up to 15A. Pulse width modulation from 10% to 100%.
Limit Switches	Stow, Azimuth, and Elevation switches
Power	24V DC provided by UIU’s 110 to 240V, single phase, 50/60Hz, 500W power supply.
Physical	
IP65 Flight Cases	Case 1 - 795X518X310mm 22.15kg (Reflector) Case 2 - 795X518X310mm 21.75kg (Tri-pod) Case 3 - 795X518X310mm 20.15kg (Feed) Case 4 - 795X518X394mm 26.10kg (Elevation)
User Interface Unit	1U Rack mounted Control panel containing PSU: 19” (483mm) x 1.75” (44mm) x 16”(406mm)
Standards	
Designed to meet EN55022, EN50082-1, ITU-R S.580-6/S.465-5, INTELSAT IESS-601, EUTELSAT EESS-502, FCC 26.209	

NORTH AMERICA
USA
Tel: +1 703 659 9796
Fax: +1 703 635 2212
info.usa@advantechwireless.com

CANADA
Tel: +1 514 420 0045
Fax: +1 514 420 0073
info.canada@advantechwireless.com

EUROPE
UNITED KINGDOM
Tel: +44 1480 357 600
Fax: +44 1480 357 601
info.uk@advantechwireless.com

RUSSIA & CIS
Tel: +7 495 971 59 18
info.russia@advantechwireless.com

INDIA
Tel: +91 33 2415 5922
info.india@advantechwireless.com

SOUTH AMERICA
Tel: +1 514 420 0045
Fax: +1 514 420 0073
info.latam@advantechwireless.com

BRAZIL
Tel: +55 11 3054 5701
Fax: +55 11 3054 5701
info.brazil@advantechwireless.com

An ISO 9001 : 2008 Company

Ref.: PB-IPINTR-Ku-002-13150