

FLYAWAY

Mobile-Uplink Systems (1.8m Ku/C-Band)



Features

- Excellent Value – Better Value and Lower Operating Costs Than Any Competing Uplink Systems
- Portable – Air Craft Baggage Shippable
- Fast Response – Dependable, Reliable Alignment, Set Up and Operation
- Rugged – Designed For Harsh Environments
- Fast Deployment – Can Be Installed by Only One Person
- Easy Operation – Easy Front Access to All the System's Input's, Outputs and Monitoring Ports
- Universal System – System Accommodates World Voltages and Color Standards
- Reliability – Our Systems are 100% Field Tested

Applications

News Agencies, Universities, Corporations, Religious Institutions, Any Entity that Needs Fast and Temporary Satellite Access

Excellent Value, Rugged, Reliable Uplink System

ATCi introduces FLY AWAY Mobile-Uplink System, a totally new, cost-effective concept in C & Ku-Band portable systems for quick, dependable satellite communication response. The ATCi Fly Away Mobile-Uplink System is a complete C or Ku-Band portable satellite terminal system capable of uplinking any video content over satellite.

Complete Fly Away mobile-Uplink System includes: C or Ku TX/RX antenna, SSPA, Upconverter, modulator, encoder, multiplexer, IRD, access panel, complete integration and Spectrum Analyzer test unit. All for a very economical price.

FLY AWAY Mobile-Uplink System Takes Lightweight and Convenience to a Whole New Level

The portable system consists of 4 boxes, 3 of which hold the antenna (see picture) and the fourth box houses the electronic equipment. In addition to its superior performance, the antenna system is lightweight with minimum parts for fast deployment. The system's electronics is housed in a rugged portable rack with shock mounts and wheels (removable) for protection and ease of movement both onsite and offsite. Just hookup your video and audio source to the front panel, direct your antenna and start broadcasting!

**Packages customized per customer requirements.*

Specifications: FlyAway Mobile Uplink Systems (1.8m Ku/C-Band)

Antenna Basic Features

- 1.8 m/5.9 feet Antenna
- Preassembled Tripod Base Mount with Pull Pins
- All Aluminum Cases for Easy Transportation
- Patented Four Pieces Dual Skin Metal Reflector
- C and Ku Bands
- Feed Interface: WR137 (C Band), WR75 (C-band) or N-Type coax.
- Sturdy Boom Accommodates Many Outdoor Units
- Self Leveling Feet for Uneven Surfaces
- Azimuth and Elevation Hand Crank for Easy Adjustment
- 5 Minute Setup

RF and Encoding System (Electronics in Rack)

- Frequency range: C-Band 5.85-6.425 GHz
Ku-Band 14.0 – 14.5 GHz
- RF Power output: Ku Band 100 Watts
C-Band 200 Watts
- Modulator scheme: QPSK
- Maximum data rate: 17.5 Mbps
- FEC: 1/2, 3/4, 5/6, 7/8.
- Video Format: NTSC and PAL
- Video Input: Analog composite or Digital SDI
- Closed Caption: Supported

C-Band

C-Band Linear

	Receive	Transmit
Polarity		
Frequency	3.4-4.2 GHz	5.7-6.725 GHz
Feed - 2 Port Xpol		
Return Loss	17.7 dB typ	17.7 dB
Insertion Loss	0.2 dB	0.2 dB
Tx/Rx Isolation	40 dB	70 dB
Feed Interface	WR229	WR137 or N

Antenna Specifications

Efficiency	70%	70%
Midband Gain	35.6 dBi	39.8 dBi
Noise Temperature	55 K @ 10° 50 K @ 30°	---
Cross Pol On Axis	30 dB	30 dB
1 dB beamwidth	22 dB	25 dB
Tx/Rx Sidelobe Level	MainBeam < 0 < 7° 7° < 0 < 9.2° 9.2° < 0 < 48° 48° < 0 < 180°	29-25 Log 0 dBi +8 dBi 32-25 log 0 dBi -10 dBi (Avg.)

Ku-Band

Ku-Band Linear

	Receive	Transmit
Polarity		
Single Optic Frequency	10.7 - 12.75 GHz	13.75-14.5 GHz
Feed - 2 Port Xpol		
Return Loss	17.7 dB typ	20 dBtyp
Insertion Loss	0.3 dB typ	0.1 dBtyp
Tx/Rx Isolation	40 dB	80 dB
Feed Interface	WR75	WR75

Antenna Specifications

Efficiency	70%	70%
Midband Gain	45.3 dBi	47.0 dBi
Noise Temperature	55 K @ 10° EL 50 K @ 30° EL	---
Cross Polarization On Axis	30 dB	30 dB
within 1 dB Beamwidth	22 dB	26 dB
Tx/Rx Sidelobe Level	MainBeam < 0 < 7° 7° < 0 < 9.2° 9.2° < 0 < 48° 48° < 0 < 180°	29-25 Log 0 dBi +8 dBi 32-25 log 0 dBi -10 dBi (Avg.)

Mechanical Data

Antenna Optics	Single Offset
Mount Type	Elevation over Azimuth Tripod
Elevation Adjustment	0° to 90° Continuous Fine Adjustment
Azimuth Adjustment	+ 30° Fine, 360° Continuous

Weights and Dims	Standard	Metric
Reflector Case (2 Required)	88 lbs. 11x44x43 in	40 kg. 28x112x109 cm
Mount Case & Accessory	156 lbs. 69x29x19 in	71 kg. 175x74x48 cm

Environmental Data

Wind Loading		
Operational	50 mph*	80 km/h*
Survival	75 mph*	121 km/h*
	* (With Ballast or Anchors)	
Temperature	40° to 140°F	-40° to 60°C
Rain	.5 inches per hour	1.3 cm /h
Solar Radiation	360 BTU/h/ft²(1000 Kcal/h/m)²	

**Weights may differ slightly depending on mount configuration

Monitoring System

The following test Points are available:

- LNB output
- Modulator: L Band Output
- Transmitter: C and Ku Band Output @ 40 dB Attenuation
- IRD: Analog and ASI Output