

## 1.2 M Auto-Acquisition Flyaway Antenna System

The system is operational in Ku frequency bands and uses a DVB receive stream for satellite acquisition and identification.



The ASC Signal 1.2m Auto-Acquisition Flyaway Antenna System is designed for use worldwide for transportable applications serving data, voice and communications networks.

The 1.2m Flyaway antenna system provides a high quality, dependable antenna platform supported by the ASC Signal service and support network. The antenna system features various easy to install features that allows for quick setup for auto-acquisition. It can be taken apart in minutes for packing into transit cases for easy transport.

The versatility of the 1.2m Flyaway allows for end users to integrate the antenna to fit their required BUC and LNB configurations. After setup, the 1.2m Auto-Acquisition Flyaway Antenna System auto-acquires in approximately 2 minutes.

- Operational in Ku-band frequencies
- Portable LCD handheld unit for total antenna control
- Removable 2 piece reflector
- Optional BUC/LNB configurations
- Optional on board stow/deploy switch
- Designed to be modem independent
- Heavy duty transit cases for transport
- Optional CARC Paint for FED-STD colors
- Optional Non-Standard Colors
- All materials comply with EU directive No. 2002/95/EC (RoHS)

# SPECIFICATIONS

## 1.2 M Auto-Acquisition Flyaway Antenna System

### Mechanical Performance

Reflector Size .....	1.2 m (48 in)
Mount Type .....	Elevation over Azimuth with Motorized Polarization Adjustment
Auto-Acquisition Time .....	2 Minutes Nominal
Tracking & Deploying Azimuth Speed .....	2.5 degrees/second Nominal
Tracking & Deploying Elevation Speed .....	1.5 degrees/second Nominal
Peaking Speed .....	Per US Patent 6657588
Type of Motors .....	3 Point Peaking Technique 12 V DC Permanent Magnet Planetary Gearmotor
Mounting Interface .....	Case Mount Base
Elevation Adjustment Range .....	0° to 90° of Reflector Boresight
Azimuth Adjustment Range .....	± 200°
Polarization Adjustment Range .....	± 90°

### BUC Mounting Specifications

Feed Cradle (Flange-Pol Drive) .....	12 in (30 cm)
Feed Cradle Width .....	9.5 in (24 cm)
Maximum BUC Width and Height .....	6.3 in (16 cm) Square
Maximum Allowable Weight .....	10 lb (4.5 kg)
Mean Time Between Failure .....	15000 Hours (Continuous Operation)
BUC Sizes .....	10 lb on Flange 25 lb on Feed Boom Arm

### Net Weight and Dimensions

Antenna Dimensions (Stowed) .....	82 in x 49 in x 14.5 in (208 cm x 124 cm x 37 cm)
Antenna Weight .....	216 lb (98 kg)
User Interface Unit Dimensions .....	16 in x 14 in x 1.75 in (40 cm x 35 cm x 4 cm)
User Interface Unit Weight .....	5.6 lb (2.5 kg)

### Antenna System Options

PC Software - Antenna Controller User Interface  
Includes: Software, Emergency Stop, USB/Serial Hub, and Standard Cable or Coil Cable

Available Upgrade for Boom Arm BUC Mounting . . . 25 lb (11.3 kg) Max.

Handheld Controller Storage Hook

Wireless Antenna Handheld Controller (Wi-Fi)

CARC Painted with FED-STD Color

Non-Standard Colors

### Antenna RF Performance

Effective Aperture .....	1.2m (48 in)	
Gain (± .3 dBi) .....	Tx .....	43.3 dBi @ 14.25 GHz
	Rx .....	41.8 dBi @ 11.95 GHz
Operating Freq .....	Tx .....	13.75 - 14.50 GHz
	Rx .....	10.70 - 12.75 GHz
3 dB Beamwidth .....	Tx .....	1.2° @ 14.3 GHz
	Rx .....	1.5° @ 12.0 GHz
10 dB Beamwidth .....	Tx .....	2.2° @ 14.3 GHz
	Rx .....	2.7° @ 12.0 GHz
Antenna Noise Temp .....	10° El .....	45° K
	20° El .....	31° K
	30° El .....	24° K
VSWR .....	Tx .....	1.3:1
	Rx .....	1.5:1

### Feed RF Performance

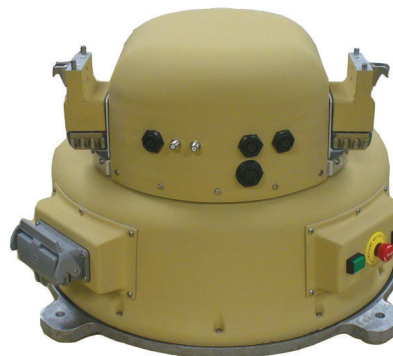
Polarization .....	Linear Orthogonal	
Cross-Pol Isolation .....	30 dB in 1 dB Contour	
Isolation, Port-to-Port .....	Tx .....	80 dB
	Rx .....	35 dB
Feed Interface .....	Tx .....	WR75 Flat Flange
	Rx .....	WR75 Flat Flange

### Electrical Requirements

Operating Voltage .....	12-14 VDC, 20 amps Max 120/240 V AC Available
DVB Carrier Parameters Required for Antenna Acquisition	
RF Input Range .....	950-2150 MHz 65 dBm to 25 dBm
Symbol Frequency Rate .....	1 Msps ~ 45 Msps
Signal Type .....	QPSK

Quick Disconnect Power & RF Connectors  
for Removing Split Reflector and Feed Assembly

Integrated UIU to ODU  
Control & RF Cable with  
One Piece Integrated  
Connector



Integrated STOW/DEPLOY Switch  
with E-STOP



  
**ascSignal™**  
Connecting The World  
ASC Signal Corporation  
Earth Station Antennas  
1120 Jupiter Road, Suite 102  
Plano, Texas 75074 USA

Telephone: +1-214-291-7628  
Fax: +1-214-291-7655

Internet: [www.ascsignal.com](http://www.ascsignal.com)

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Boyertown PA 610-754-6800 ext7 & Framingham MA 508-333-0337 [www.broadcastassociates.com](http://www.broadcastassociates.com)