7000 Controller



by C-COM Satellite Systems Inc.

TECHNICAL SPECIFICATIONS





Online with the touch of a button...

- Simple stand-alone one touch operation to find satellite and stow antenna
- Typical satellite acquisition time in less than 2 minutes
- Ideal for applications that require a quick, simple setup and reliable connection
- Internal DVB receiver provides modem independence
- Based on an embedded software solution

Features

- One touch stand-alone solution
- Front Panel Configurable
- Compatible with all iNetVu mobile platforms
- Supports DVB-S1 and DVB-S2/ACM frequencies
- Optimal, high-precision antenna pointing
- Remote access and operation via Network, Web and other Interfaces
- Built-in motion and movement protection for safety
- Supports inclined orbit satellites
- Integrated with multiple modems
- · Works with GPS and GLONASS Satellite Navigation Systems
- GPS signal available for external devices
- Easy to configure and operate
- Interoperable with Uplogix's remote management appliances

Integrated DVB-S2/ACM Tuner

The DVB-S2/ACM Tuner is an integrated part of all iNetVu 7000 controllers. It allows the iNetVu system the option to find the satellite with and without the use of a satellite modem. Compact and adaptable, this high performance tuner is programmable to any DVB-S or DVB-S2/ACM frequency and allows the user to pre-configure specific satellite options.

Modem Compatibility

UHP-1000

Certain service providers require additional communications functions for the satellite modem, such as GPS location, auto coss-pol and others. The 7000 controller has been fully intergrated to provide these requirements for all compatible modems.

HughesNet	iDirect	Viasat	ipstar
DW6000 /DW7000	iNFINITI 3000 Series	Linkstar II	IPX-5100
HN7000	iNFINITI 5000 Series	Linkstar IV	IPX-9200
HN7000S	iNFINITI 7000 Series	Linkstar S2	
HN7700	Evolution X5	Linkstar S2A	Gilat
HN7700S			Skyedge II
HX50	Radyne	Tachyon	Skyedge IP
HX100	DMD20	CI-1300	, ,
HX 200	DMD20 LBST	Ruggedized RMG	Comtech
HX 250	SkyWire MDX420		CDM-600L
HX 260		Paradise	CDM-570L
	STM	Evolution Series	CDM-625
Eastar	SatLink 1000	Quantum Series	

Optional Beacon Receiver

An optional 19" rack mount iNetVu Beacon Receiver (BR300L) is available and has been integrated to work with the iNetVu Controllers. This external self contained compact unit detects the power density of the satellite beacon (930MHz - 2300MHz) and is connected to the Controller via an RS232 serial port interface.

Interfaces

GPS Antenna: SMA Connector
RF Rx In: Type F Connector
RF Rx Out: Type F Connector
Sensor Input: DB26 Connector

Motor Control: 9-Pin Circular AMP Connector

Network Interface: RJ45 Connector
USB 2.0 (Full Speed): USB Type B Receptacle
Serial Port: DB9 Female Connector

Electrical

LNB Power: Disable, 13V, 14V, 18V, 19V,

20V, 21V @ 500 mA (max.)

Model 7000B⁽¹⁾ 7024⁽¹⁾

Universat AC Input 90 - 264VAC, 2.2 - 1.1A 90 - 264VAC, 2.2 - 1.1A 47 - 63 Hz 47 - 63 Hz

 Idle Power Consumption
 12VDC @ 1A
 24VDC @ 0.5A

 Elevation Power:
 12 VDC @ 12A (max.)
 24 VDC @ 6A (max.)

 Azimuth Power:
 12VDC @ 12A (max.)
 24 VDC @ 3A (max.)

 Polarization Power:
 12VDC @ 3A (max.)
 24 VDC @ 1A (max.)

Physical

Dimensions: 19" 1U Rack Mountable Unit Standard Height: 1.75" (44.5mm) Width: 17.1" (434mm) Depth: 11.0" (279mm) Weight: 9.9 lbs. (4.5kg)

Environmental

Operating Temperature: -20° to $+50^{\circ}$ C (-4° - 122° F) Storage Temperature: -40° to $+60^{\circ}$ C (-40° - 140° F)

Warranty

Standard 2 years

Certification

Complies with FCC Part 15 Class B

CE Approvals for Emission & Immunity Standards

⁽¹⁾ Required for certain antenna models





SatLink 1910

7000 Controller



TECHNICAL SPECIFICATIONS

There are SEVEN methods of finding satellite with the iNetVu 7000B controller:

- DVB Search Searches directly for any DVB-S1 or DVB-S2 (ACM) carrier on the target satellite and peaks on it.
- **DVB Search, Opposite Polarity** Searches for DVB-S1 or DVB-S2 carrier in the opposite polarity on target satellite, then rotates polarization axes and enables transmitter if modern signal attained.
- DVB Search, Reference Satellite Searches for a DVB-S1 or DVB-S2 carrier on ANY configured reference satellite then moves to the target satellite and peaks on modem signal.
- **RF Automatic Search** The system will stop and search for modem signal when it senses an increase in RF energy received through the DVB tuner as it passes by the target satellite. If the modem signal is found, the system will begin the peak process.
- **RF Override Search** The user specifies an RF Threshold such that the system stops when it reaches an area above the threshold and looks for modem signal to peak on.
- **Beacon Receiver** The Controller works seamlessly with the optional iNetVu Beacon Receiver by searching for a specified beacon frequency and then peaks on it (search gain level can be adjusted).
- Auto Deploy Method Peaks on a reference satellite then uses precise pointing mechanism to locate the target satellite, even when no modem RF or beacon signal is available to peak on.

The iNetVu 7000 Controller:

- Can be operated from a PC application using the USB port
- Via its web interface, it can be operated remotely or locally over a network connection
- Can be completely configured from the front panel with a password protected configuration menu
- Protects the platform and its components from damage, using current levels and sensor readings. It includes motion and movement protection as well
- Provides automatic re-peaking if signal degradation occurs
- Works correctly even when deployed while on an incline (in any direction) of up to 25°
- Can search for both DVB-S and DVB-S2/ACM carriers
- Supports full automatic and manual control of the iNetVu Platform
- Allows the users to select from multiple speed levels for both azimuth and elevation
- Allows the system to operate unattended in remote locations
- Is able to upload the recorded log information (maximum of 12 hours) from the controller to the PC for troubleshooting
- Supports full tracking of Inclined Orbit satellites by both signal strength and timed function
- Is capable of powering the LNB with 13-21 Volts, selectable in software
- Provides the option of saving the settings to a configuration file that can be used to configure additional controllers with the same configuration parameters
- Works seamlessly with Uplogix Remote Management Appliances
- Supports both GPS and GLONASS Satellite Navigation Systems
- Supports Electronic Flux Gate Compass for increased speed of acquisition
- Designed and Manufactured to the highest standards of quality and reliability by C-COM
- Supports all iNetVu Mobile antenna platforms

