7000/7024 Controller

iNetVu®

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-S 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
- Works with OpenAMIP
- Global Position Information available for external devices
- Easy to configure and operate
- Interoperable with Uplogix's remote management appliances
- Supported languages by GUI interface: English, Arabic, Russian, Swedish, Chinese (Mandarin, Traditional) and Spanish
- Standard 2 year warranty

Modem Compatibility*

The DVB-S2/ACM Tuner is an integrated part of all iNetVu® 7000/7024 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.

HughesNet
DW 6000/7000
HN 7000/7000S
HN 9200/9260
HN 9400/9460
HN 9600/9800
HX 50/90/100/200/250/260
HT 1100/2000/2300/2500

ipstar
IPX-5100/9200
IPX-3200

Gilat
Skyedge II/IP
Skyedge II/Pro/Access
Skyedge IIc (Standalone)

iDirect
iNFINITI 3000/5000/7000 Series
Evolution X5/X7/IQ200
Velocity - X7

Comtech/ Radyne
CDM-600L/570L/625/840
DMD 20/DMD 20 LBST
SkyWire MDX420

Romantis/UHP/Eastar
UHP-1000/200

STM
SatLink 1000/1910/2000/2900

Newtec
MDM-3100 (standalone)
MDM 3X00/MDM2510/MDM6000

Viasat
Linkstar II/IV/S2/S2A
Surfbeam II/PRO
Surfbeam ll Auto-acquire
Tooway/PRO

Paradise
Evolution/ Quantum Series

Tachyon
CI-1300
Ruggedized RMG

Spacebridge (Advantech)
E7000 (S5100)
U7400 (S5420)

* Please contact C-COM if you require more information about modem compatibility as these may change without further notice

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.

Optional GPS/GLONASS Compass

An optional GPS/Glonass based compass is available and has been integrated with the iNetVu Controllers. This external compact device can be fitted on roof of vehicle beside the iNetVu platform to provide accurate vehicle heading within 1 degree irrespective of the surrounding magnetic field. The precise heading of the antenna translates to a smaller search window and hence faster satellite acquisitions. Interfaces to the controller via RS-232 serial port.

Interfaces

GPS Antenna	SMA Connector
RF Rx In / 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

Model	7000C	7024C
Universal AC Input	100- 240VAC, 2.2 - 1.1A 50/60 Hz	100- 240VAC, 2.2 - 1.1A 50/60 Hz
DC Input	12VDC @ 15A (Max.)	24VDC @ 8A (Max.)
Elevation Power	12VDC @ 15A (Max.)	24VDC @ 8A (Max.)
Azimuth Power	12VDC @ 10A (Max.)	24VDC @ 6A (Max.)
Polarization Power	12VDC @ 3A (Max.)	24VDC @ 2A (Max.)
Idle Power Consumption	12VDC @ 1A	24VDC @ 0.5A
LNB Power	Disable, 13V, 14V, 18V, 19V @ 500 mA (Max.)	

Physical

Dimensions	19" 1U Rack Mountable Unit
Standard	H: 4.5cm (1.75") W: 43cm (17.1") D: 28cm (11.0")
Weight	4.5kg (9.9 lbs)

Environmental

Operating Temperature	-20°C to +60°C (-4°F - 140°F)
Storage Temperature	-40°C to +70°C (-40°F - 158°F)

Shipping dimensions

Shipping box: 54 cm × 44 cm × 20 cm (21" × 17" × 8") ; 7kg (15 lbs)
Optional - See Transportable Cases datasheet

Certification

FCC Part 15 Class B, CE & VCCI Approvals for Emission & Immunity Standards

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SEVEN methods of finding satellite with the iNetVu® 7000/7024 controller

- DVB Search - Searches directly for any DVB-S or DVB-S2 (ACM) carrier on the target satellite and peaks on it.
- DVB Search, Opposite Polarity – Searches for DVB-S or DVB-S2 carrier in the opposite polarity on target satellite, then rotates polarization axes and enables transmitter if modem signal attained.
- DVB Search, Reference Satellite - Searches for a DVB-S 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® 7000/7024 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 15°
- 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 13-19 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

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