

Application - Defense (Military) SatCom-Wireless

- Range Timing
- Communications Networks
- Satellite Ground Stations
- Test and Measurement Systems



General Description:

The Model 8461 is a Stratum 1 Network Time Server that is synchronized from an optical IRIG-B DC-level shift link or a wireline Modulated IRIG B link providing time synchronization of <1 microsecond of time reference. The optical link provides a time synchronization bridge to Isolated Network Domains. The NTP server supports NTPv2, v3, v4 and SNTP clients. An onboard OCXO provides holdover capability in the event that synchronization is lost from the IRIG reference.

Configuration and status of the system can be done through the Ethernet interface using a Web browser, or through a command line using Telnet or SSH. An RS-232 I/O is also available for configuration and status using the command line interface. The Model 8461 can be powered from an external wall plug AC/DC power supply or from Power over Ethernet (PoE) capable switches. Power and Status LED indicators are provided for visual status and a recessed push button reset switch to set the network port IP address to factory default.

Specifications:		Connector:	RJ-45
Input Time Reference Optical:		RS-232 Port	
Time Code:	IRIG-Boo2 (year set manually) or IRIG-Boo6 (year set from time code)	Signal Level:	RS-232
Optical Wavelength:	820 nm	Baud Rate:	9600
Optical Cable:	Multimode 50/125µm, 62.5/125µm, 100/140 µm and 200 µm	Protocol:	8-data bits, 1 stop bit, no parity
Optical Cable Length:	2,000 meters with 62.5/125 µm optical cable	Connector:	9-pin femal D-sub
Connector:	ST	Power:	
Wireline:		External AC/DC	Wall Mount Power Supply
Time Code:	IRIG-B122 (year set manually) or IRIG B-126 (year set from time code)	Power over Ethernet (PoE) IEEE-802.3af -2003	7 watts max, type 1 class 3.
Input Level:	1.0 to 6.0 Vpp	Environmental:	
Modulation Ratio:	2:1 to 6:1	Operational Temperature:	-40°C to +85°C with PoE, 0°C to +40°C with external AC/DC power
Impedance:	50 ohm single ended	Storage Temperature:	-40°C to +85°C
Connector:	BNC	Humidity:	0 to 95% non-condensing
Ethernet Port		Transportation Shock and Vibration:	Common Carrier
Interface:	10/100 BaseT	Physical:	
Internet Protocol:	IPv4, IPv6	Dimensions:	5.1" L x 4.7" W x 1.6" H
Network Protocols:	HTTP, HTTPS, SSH, TELNET, SNMP, v1,v2, v3, DHCP	Weight:	< 1lbs
Network Time Protocols:	NTP v2, v3, v4, SNTP, MD5 Authentication	Mounting:	Four # 6-32 screws in base
		Optional Mounting:	U rack mount adapter

Specifications subject to change without notice.

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