19”/2 SSW501

Rugged NTP Server

The 19”/2® LANTIME SSW501 is a rugged time server designed for demanding environments based on a Meinberg platform. This platform is used around the world to provide accurate time to networks of any size. It´s a very reliable and accurate time source for all systems either NTP- or SNTP-compatible and it uses a built-in ultra-stable oscillator as its primary reference time source.

The configuration of the system can be managed by using a standard web browser for accessing the extensive but straightforward html interface. Alternatively, a text based, and menu driven setup utility can be started from the shell prompt after logging into the unit via Telnet or SSH.

Mounting

The 19"/2 standard enables flexible mounting with customized brackets. The unit can be mounted in a 19" rack, half racks, or directly to a surface and in any angle.

Customizable

Are you looking for features and functions beyond the standard solution? MilDef specializes in customized solutions, to include change of connectors, chassis modifications, mounting solutions, etc. Contact your nearest MilDef Sales Office and we will help you tailor a solution to meet your requirements.

Guaranteed performance

Our products come with a lifetime support program to ensure your equipment maintains peak performance for many missions to come. We also guarantee the availability of spare parts for 5 years after product end-of-life.

Features

- GPS support
- PPS in
- PPS out
- NMEA

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Technical Specification

Description	A rugged time server in the 19”/2 form factor, based on a Meinberg NTP server card.
GNSS (Global navigation satellite system)	
GPS	Supported
Galileo	Not supported
GLONASS	Not supported
BeiDou	Not supported
Oscillator	
Type	OCXO-HQ (Morion XO00465M)
Accuracy of time	+/- 788ms (one year free running mode)
GPS Antenna	
Antenna type	Supports Meinberg GPS Antenna
Protocols	
IP	IPv4 /IPv6
DHCP	Yes (IPv4 /IPv6)
NTP	NTP v2, NTP v3, NTP v4, SNTP v3), SNTP v4 (MD5 / SHA-1 Authentication and Autokey Key Management)
PRP	PRP (IEC 62439-3)
TIME	Time Protocol (RFC 868)
DAYTIME	Daytime Protocol (RFC 867)
IEC 61850	Synchronization of IEC 61850 compliant devices by using SNTP
HTTP	HTTP/HTTPS
SSH	SSH v1.3, SSH v1.5, SSH v2 (OpenSSH)
Telnet	Yes
SNMP	SNMPv1, SNMPv2c, SNMPv3
Interfaces	
Ethernet	1x Ethernet 100Base-TX
Console	1x Serial 1x USB
Power	1x DC in
USB	1x USB Host
GPS	1x GPS Antenna (Meinberg Antenna)
NMEA	1x NMEA
PPS	1x PPS in 1x PPS out
MilDef Service Port	1x Service port

Technical Specification (cont.)

Size & Weight	
Dimensions (W x D x H)	220 x 381 x 44 mm (8.66 x 15.0 x 1.73 inch)
Weight	3,5 kg
Temperature	
Operational	0°C to +55°C (-4°F to +32°F)*
Storage	-40°C to +71° (-40°F to +160°F)
Power	
Power input	10-32 VDC
Transient power protection	Surge & burst on DC in
Standards	
CE	Yes
Environment	MIL-STD-810F IP54
EMC/EMI	MIL-STD-461F
Warranty	
Warranty	5 years
Customization	

Need anything not included in the data sheet? MilDef products are designed to enable customization to your specific program requirements. Please contact your MilDef sales team member to find the best solution for your requirements.

** -20°C extended temperature option available.*

Accessories & Options

Antenna	
Meinberg GPS Antenna	The GPS antenna combines a planar antenna and a frequency converter, which translates the high-frequency phase-modulated spread spectrum signal of the GPS system to an intermediate frequency. This way a standard coaxial cable (e.g. RG58) can be used for the connection with the GPS clock and a distance of up to 300 meters or even 700 meters (with a low-loss cable type) between receiver and antenna is possible without additional amplifier.

Environmental Specification

Low Air pressure	
Low air pressure – Rapid Decompression MIL-STD-810F, Method 500.4, *Procedure III*	12.192 m / 40.000 ft
Low air pressure - Operating MIL-STD-810H, Method 500.4, *Procedure II*	4.572 m / 15.000 ft
IP Class	
IP	IP54
Humidity	
Humidity – Storage MIL-STD-810F, Method 507.4	Five 48 h test cycles
Shock	
Functional Shock - Operating MIL-STD-810F, Method 516.5 Procedure I - Figure 516.8-IV	Terminal-peak sawtooth shock pulse 40g, 11ms
Salt Fog	
Salt fog - Storage MIL-STD-810F Method 509.4	Salt concentration of 5 % +-1 % (48 h wet +48 h dry/cycle)
Temperature	
Low temperature - Operating MIL-STD-810F Method 502.4 *Procedure II – Operation*	0 °C / 32 °F
Low temperature - Storage MIL-STD-810F Method 502.4 *Procedure I – Storage*	-40 °C / -40 °F
High temperature - Operating MIL-STD-810F Method 501.4 *Procedure II – Operation*	55 °C / 131 °F
High temperature - Storage MIL-STD-810F Method 501.4 *Procedure I – Storage*	71 °C / 160 °F
Temperature Shock – Non-Operating MIL-STD 810F Method 503.4 *Procedure I*	0°C / 32°F to 55°C / 131°F
Vibrations	
Vibration - Operational MIL-STD-810F, Method 514.5	*Category 14* *Category 20a* *Category 20b*
Vibration - Storage MIL-STD-810F, Method 514.5	*Category 2*

EMC Specification (optional)

MIL-STD-461F	
Method RE102	10 kHz to 18 GHz (Navy Mobile & Army)
Method RS103	2 MHz to 1 GHz (Army)
Method CE102	10 kHz to 10 MHz (Basic Curve)
Method CS101	30 Hz to 150 kHz (Curve #1)
Method CS114	10 kHz to 200 MHz (Army)
Method CS115	Tested according to standard (Army)
Method CS116	10 kHz to 100 MHz (Army)