



## Meinberg Radio Clocks

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## LANTIME M250: High-Performance NTP Time Server in a Compact Chassis

The LANTIME M250 network time server is designed by Meinberg to offer superior NTP server performance in a medium or small sized network environment. Constructed to order with a selection of signal receivers to enable you to synchronize your time server to the remote timing signal that you trust most. Our LANTIME M250 can be built to support timing signals from any of the main satellite navigation systems in operation (GPS, Galileo, BeiDou, GLONASS) or from a long-wave timing signal radio service (e.g MSF or DCF77).

### Key Features

- Selectable Reference Sources: GPS: Satellite receiver for the Global Positioning System GNS: Combined GPS/GLONASS/Galileo/BeiDou satellite receiver, can also be used for mobile applications GNS-UC: GPS and Galileo Satellite Receiver with Up-Converter for Meinberg GPS Antenna/Converter PZF: DCF77 correlation receiver for middle europe MSF: Long wave receiver for Great Britain
- Synchronizes NTP-compatible clients with support for NTP, SNTP, and NTS - Network Time Security
- Web interface that is both powerful and easy to use
- Backlit LCD panel and function keys for local configuration
- USB port for installation of firmware updates, backup/restore of configuration and log files, and disabling/enabling access to front panel controls
- Command line interface for advanced power users with absolute control over every facet of the server's functionality
- Comprehensive networking support, including full HTTPS encryption for Web Interface and REST API with TLS certificate management
- Support for syslog, SNMP, and SMTP for comprehensive event logging, network integration, and notification functionality
- GNS models include Multi-GNSS antenna for reception of GPS, Galileo, BeiDou, and GLONASS signals
- GPS and GNS-UC models include Meinberg IF antenna of reception of GPS signals and, with GNS-UC models, also Galileo signals

## Description

Meinberg's custom Linux-based LANTIME OS, a slim & secure operating system developed specially for the needs of a time server, powers the LANTIME M250 under the hood, providing access to all the security, network, and monitoring features that you could ever need from an enterprise-grade synchronization appliance.

The powerful Web UI enables you to quickly and easily configure and monitor your LANTIME device, while the CLI provides power users with unparalleled flexibility and efficiency. The comprehensive LANTIME OS REST API provides a complete toolset for your network orchestration and automation needs, and SNMP support allows you to integrate your Meinberg systems into your existing network management system.

### Oscillator Options

The LANTIME M250 is shipped as standard with a

## Characteristics

<b>Status Indicators</b>	Four bicolor LEDs indicating: <ul style="list-style-type: none"> <li>- Reference time status</li> <li>- Time service status</li> <li>- Network link status</li> <li>- Alarm states</li> </ul>
<b>Display</b>	LC-Display, 2 x 40 Characters, with Backlight
<b>Control Elements</b>	Eight push buttons to set up basic network parameters and to change receiver settings
<b>Network Interface</b>	1 x 10/100/1000Base-T RJ45 Up to 25,000 NTP requests/second
<b>Universal Serial Bus (USB) Ports</b>	1x USB Port in rear panel: <ul style="list-style-type: none"> <li>- install firmware upgrades</li> <li>- backup and restore configuration files</li> <li>- copy security keys</li> <li>- lock/unlock front keys</li> </ul>
<b>Power Consumption</b>	20 W (typ.)
<b>Operating Voltage</b>	<b>Standard:</b> UN = 100-240 V AC (50/60 Hz) / 100-200 V DC Umax = 90-265 V AC / 90-250 V DC  <b>Available DC variants:</b> UN = 100-200 V DC, 24 V DC and 24-48 V DC Umax = 90-250 V DC, 10-36 V DC and 20-60 V DC  Redundant power supply combinations available

<b>Form Factor</b>	Desktop housing (335 x 45 x 240 mm)
<b>CPU</b>	* Intel® Atom
<b>Operating System of the SBC</b>	Custom LANTIME OS based on Linux 4.x LTS Kernel.
<b>Network Protocols OSI Layer 4 (Transport Layer)</b>	TCP, UDP
<b>Network Protocols OSI Layer 7 (Application Layer)</b>	Telnet, FTP, SSH (including SFTP, SCP), HTTP, HTTPS, syslog, SNMP
<b>Internet Protocol (IP)</b>	IPv4, IPv6
<b>Network Autoconfiguration Support</b>	IPv4: Dynamic Host Configuration Protocol - DHCP (RFC 2131) IPv6: Dynamic Host Configuration Protocol - DHCPv6 (RFC 3315) and Autoconfiguration Networking - AUTOCONF (RFC 2462)
<b>Network Time Protocol (NTP)</b>	NTP v2 (RFC 1119), NTP v3 (RFC 1305), NTP v4 (RFC 5905) SNTP v3 (RFC 1769), SNTP v4 (RFC 4330) MD5 / SHA-1 Authentication and Autokey Key Management
<b>Time Protocol (TIME)</b>	Time Protocol (RFC 868)
<b>IEC 61850</b>	Synchronization of IEC 61850-compliant devices using SNTP
<b>Hypertext Transfer Protocol Secure (HTTPS)</b>	HTTP(S) for web interface and REST API access
<b>Secure Shell (SSH)</b>	SSH v1.3, SSH v1.5, SSH v2 (OpenSSH)
<b>Telnet</b>	Telnet (RFC 854-RFC 861)
<b>Supported Temperature</b>	Operational: 0 - 50 °C (32 - 122 °F) Storage: -20 - 70 °C (-4 - 158 °F)
<b>Supported Humidity</b>	Max. 85 % (non-condensing) at 40 °C
<b>Contents of Shipment</b>	Included in delivery is a Meinberg outdoor antenna incl. mounting kit, pre-assembled antenna cable (except TCR and RDT models).
<b>Technical Support</b>	Meinberg offers free lifetime technical support via telephone or e-mail.
<b>Warranty</b>	Three-year warranty
<b>Firmware Updates</b>	Firmware is field-upgradeable, updates can be installed directly from the unit or via a remote network connection. Software updates are provided free of charge for the lifetime of your Meinberg product.

<b>RoHS Status of Product</b>	This product is fully RoHS-compliant.
<b>WEEE Status of Product</b>	This product is handled as a B2B (Business to Business) category product. To ensure that the product is disposed of in a WEEE-compliant fashion, it can be returned to the manufacturer. Any transportation expenses for returning this product (at end-of-life) must be covered by the end user, while Meinberg will bear the costs for the waste disposal itself.
<b>Additional Information</b>	Additional information about the Meinberg LANTIME family of NTP time servers and other LANTIME models can be found on the [1] <a href="#">LANTIME overview page</a> .

#### Manual

There is no online manual available for this product.: [2][Contact us](#)

#### Links:

[1] <https://www.meinbergglobal.com/english/products/ntp-time-server.htm>

[2] <mailto:info@meinberg.de>