



LANTIME Network Time Servers



The independent Source of Time
for your Network

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LANTIME M900

The M900 can be configured with a wide variety of reference clock options, oscillator options (including Rubidium), output options and power supply options. Complex systems can easily be configured with redundant receivers, redundant power supplies and multiple output signals.

Due to the modular nature of the M900 series, virtually every Meinberg LANTIME feature can be accommodated in this time server platform, with controls and display easily accessible from the front panel and a far greater number of outputs mounted either on the front or rear panel to suit your specific needs.

LANTIME M600

The M600 is a high end NTP server with an impressive hardware configuration: 4 x Ethernet ports, an ultra-stable oscillator with fantastic holdover capabilities and a wealth of time and frequency outputs like IRIG B, 10MHz, 1PPS and frequency synthesizer. The brilliant front panel display (VFD) shows the status of the unit and displays offset values between a given input signal and the oscillator of a satellite receiver.

The M600 represents a time and frequency appliance with one of the best feature sets on the market. If the provided outputs and/or the holdover specifications match your requirements, the M600 can be a core element of your time and frequency synchronization infrastructure.



M600

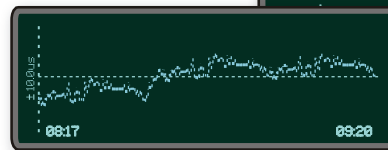
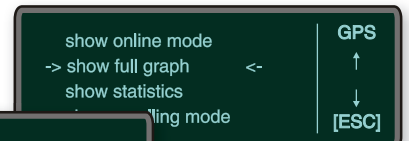
OSCILLATOR OPTIONS

Type / Holdover	1 day	1 year
TCXO	± 4.3 msec	± 16 sec
OXCXO LQ	± 865 µsec	± 6.3 sec
OXCXO SQ	± 220 µsec	± 4.7 sec
OXCXO MQ	± 65 µsec	± 1.6 sec
OXCXO HQ	± 22 µsec	± 788 msec
OXCXO DHQ	± 4.5 µsec	± 158 msec
Rubidium (M900)	± 1.1 µsec	± 8 msec

Detailed specifications at:
www.mbg.link/osc/



VF-Display
 256 x 64 dots



Full graphic mode

Main menu of the graphical VF-Display

LANTIME M300

The M300 is an extremely flexible Network Time Server with a wide variety of options available to suit your specific needs. The front panel includes an LC-Display and a keypad for easy configuration and indication of the time and operational status.

Two independent RJ45 10/100 MBit Ethernet interfaces are standard. Because of its modular system architecture it is possible to equip a LANTIME M300 Time Server with a number of different reference time sources including GPS, GLONASS, DCF77, MSF, WWVB, available IRIG/AFNOR Time Codes or an MRS version which can synchronize to a combination of different input signals with user-selectable priority and switchover time.

LANTIME M200

The LANTIME M200 Time Server provides accurate time to small and medium sized computer networks in a compact desktop chassis. The front panel includes an LC-Display and keypad for easy configuration, time display and operational status.

The M200 comes with a reference clock synchronized to either GPS, GLONASS, DCF77, MSF or WWVB. It is the perfect solution where full LANTIME functionality is required in a compact 1U chassis. An optional rackmount adapter is available to mount the M200 in a standard equipment rack.

LANTIME M400

The LANTIME M400 Time Server offers an unparalleled flexibility and versatility and provides accurate time to your network in a compact and full-featured DIN railmount package for industrial applications such as power generation, transmission and distribution (substation automation), process control and industrial automation systems. The M400 includes a backlight LC-Display and a keypad and an extremely broad range of available input and output options.



M400

LANTIME M100

This economical, entry level Time Server is particularly well-suited for industrial applications such as utility substations, process control and automation systems. The M100 is equipped with a GPS or DCF77 reference clock and includes a highly stable TCXO internal oscillator to maintain timing accuracy during periods of interference or temporary loss of synchronization. It includes a wide-range power supply that can operate from 100-240 VAC or VDC and a 19-72 VDC supply is available as an option.



M300

M100

M200

Model	M100	M200	M300	M400	M600	M900
Form Factor						
DIN Railmount	✓			✓		
Desktop		✓	✓		✓	
1U Rackmount		□	✓		✓	
3U Rackmount						✓
CPU Performance						
(S)NTP Requests per second	10000 req/s					
Network Interfaces (RJ45)						
Ethernet 10/100 MBit	1	1	2 (- 6)	1 (- 9)	4 (5)	1 (- 9)
Ethernet 10/100/1000 MBit			1 (- 3)		3	
PTPv2 - IEEE 1588				(1 - 2*)	(1 - 2)	(1 - 8)
Outputs						
PPS			✓	✓	✓	✓
10MHz			✓	✓	✓	✓
PPM			□	□	✓	✓
Frequency Synthesizer			□	□	✓	□
IRIG-B (modulated, DCLS)			□	□	✓	□
DCF77 Simulation			□	□		□
Time Sync Error			✓	✓	✓	✓
Serial Time String			✓	✓	✓	✓
Configuration Interfaces						
Front Panel Display		✓	✓	✓	✓	✓
Serial Terminal Interface / USB	✓	✓	✓	✓	✓	✓
Reference Time						
GPS	✓	✓	✓	✓	✓	✓
GLONASS	✓	✓	✓	✓	✓	✓
DCF77	✓	✓	✓	✓		✓
MSF, WWVB		✓	✓	✓		✓
External Reference Source						
- NTP, serial PPS RDT			✓			
- IRIG-B (AM, DCLS) TCR			✓	✓		
MRS (Multi Reference Source)						
- IRIG-B (AM, DCLS)			✓	✓	✓	✓
- NTP			✓	✓	✓	✓
- PTP				□	□	□
- PPS			✓	✓	✓	✓
- 10MHz			✓	✓	✓	✓
Typical Environment						
DIN Rail Installation	✓			✓		
Small Networks	✓	✓				
Medium/Large Networks			✓	✓	✓	✓
Power Supply						
AC (100V - 240V)		✓	✓		✓	✓
ACDC (100V - 240V)	✓	□	□	✓	□	□
DC (20 - 72V)	□			□		□
DC (12V, 24V, 48V)		□	□		□	
redundant Power Supply (AC+AC, AC+DC, DC+DC)			□		□	□
Oscillators						
TCXO	✓	✓	✓	✓		✓
OCXO LQ			□	□	✓	□
OCXO SQ			□	□	□	□
OCXO MQ			□	□	□	□
OCXO HQ			□	□	□	□
OCXO DHQ			□	□	□	□
Rubidium						□

✓ = Standard Configuration

□ () = Option

* (XL Housing)

LANTIME IN XL-HOUSING



M300XL



M600XL



M400XL

LANTIME Accessories

Large NTP Displays with LED numerals and PoE (IEEE 802.3af) support. Multiple housing variations with "HH:MM" or "HH:MM:SS" layout available.

ANTENNAS

GPS and long wave antennas and antenna distributors with integrated amplifier for all MEINBERG receivers.

GOAL/DOAL:

GPS/DCF77 Optical Antenna Link for connecting MEINBERG antennas and LANTIME systems. Distances up to 1,000 mtrs (~3,200ft) are supported with a single multimode FO cable.



IMS Intelligent Modular Synchronization

Built-in redundancy for synchronization sources, power supplies and cooling in combination with highly modular slot based chassis, which supports hot-swapping and field-expansion capabilities. www.mbg.link/ims/

