



Meinberg Radio Clocks

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SyncFire 1000: High-Performance NTP Time Server

The all-new Meinberg SyncFire 1000 NTP Time Server appliance offers the flexibility and reliability of the Meinberg LANTIME M-Series Product Family in a new package that is optimized for Data Center deployments. Due to its new powerful CPU options, it can synchronize hundreds of thousands of NTP and SNTP clients.

Key Features

- Selectable Reference Sources:

- * [1][GPS](#): Satellite receiver for the Global Positioning System

- * [2][GLN](#): Combined GPS/GLONASS satellite receiver (L1 frequency band), can also be used for mobile applications

- Synchronization of NTP and SNTP compatible clients
- Web based status and configuration interface [3][\(Demo\)](#) and console based graphical configuration utility
- Supported networking protocols: IPv4, IPv6, HTTPS, HTTP, SSH, TELNET, SCP, SFTP, FTP, SYSLOG, SNMP
- Alert-Notification system of status change by Email, WinMail, SNMP or an external connected display
- Full SNMP v1,v2,v3 support with own SNMP-daemon for status and configuration and SNMP Trap messages
- Antenna connected with up to 300m of standard coaxial cable RG58
- Up to six independent RJ-45 ethernet interfaces 10/100/1000 MBi

Description

The redundant, hot-pluggable power supplies and system fans ensure a 24/7 operation, 365 days a year with no or minimal downtime for repair in case of a hardware failure. The ability to add a second GPS receiver for a redundant reference time source plus the capability to form redundant network links by assigning multiple LAN interfaces to a high availability bonding group provide an unmatched level of reliability.

This makes the Meinberg SyncFire 1000 one of the world

Characteristics

Operating System	Linux with nano kernel (incl. PPSkit)
Type of receiver	12 channel GPS C/A-code receiver
Type of antenna	Remote powered [4] GPS antenna/converter unit , up to 300m distance to antenna with RG58 and up to 700m distance with RG213 cable
Display	LC-display, 4 x 20 characters
Control elements	Eight push buttons to set up basic network parameters and to change receiver settings
Status info	Four bicolor LEDs showing status of: - reference time - time service - network - alarm
Network Interface	Standard: 2 x 10/100/1000 MBit with RJ45 connector Available Options: * Additional network interface card with 4 x 10/100/1000 MBit - RJ45 jack
Power supply	Standard: 2 x 100-240 VAC / 800W redundant power supply Max. rated current 8 A Main power fuse 16 A
Network protocols OSI Layer 4 (transport layer)	TCP, UDP
Network protocols OSI Layer 7 (application layer)	TELNET, FTP, SSH (incl. SFTP, SCP), HTTP, HTTPS, SYSLOG, SNMP

Internet Protocol (IP)	IP v4, IP v6
Network Autoconfiguration Support	IPv4: Dynamic Host Configuration Protocol - DHCP (RFC 2131) IPv6: Autoconfiguration Networking - AUTOCONF
Network Time Protocol (NTP)	NTP v2 (RFC 1119), NTP v3 (RFC 1305), NTP v4 (RFC 5905) SNTP v3 (RFC 1769), SNTP v4 (RFC 2030) MD5 Authentication and Autokey Key Management
Time Protocol (TIME)	Time Protocol (RFC 868)
Daytime Protocol (DAYTIME)	Daytime Protocol (RFC 867)
IEC 61850	Synchronization of IEC 61850 compliant devices by using SNTP
Hypertext Transfer Protocol (HTTP)	HTTP/HTTPS (RFC 2616)
Secure Shell (SSH)	SSH v1.3, SSH v1.5, SSH v2 (OpenSSH)
Telnet	Telnet (RFC 854-RFC 861)
Simple Network Management Protocol (SNMP)	SNMPv1 (RFC 1157), SNMPv2c (RFC 1901-1908), SNMP v3 (RFC 3411-3418)
Form Factor	19 Inch Server Rack 1HE/84TE 431 mm x 718 mm x 43 mm (W x D x H)
Ambient temperature	10°C ... 35°C
Humidity	10% ... 85%
Scope of supply	Included in delivery is our [5] GPS antenna incl. converter unit , 20m GPS antenna cable (RG58) and product documentation.
Technical Support	Meinberg offers free lifetime technical support via telephone or e-mail.
Warranty	Three-Year Warranty
Firmware Updates	Firmware is field-upgradeable, updates can be installed directly at the unit or via a remote network connection. Software updates are provided free of charge, for the lifetime of your Meinberg product.
RoHS-Status of the product	This product is fully RoHS compliant
WEEE status of the product	This product is handled as a B2B category product. In order to secure a WEEE compliant waste disposal it has to be returned to the manufacturer. Any transportation expenses for returning this product (at its end of life) have to be incurred by the end user, whereas Meinberg will bear the costs for the waste disposal itself.

Additional Information

Additional information about the Meinberg LANTIME family of NTP time servers and other LANTIME models can be found on the [6][LANTIME NTP Time Server Family Page](#).

Note: The SyncFire 1000 cannot operate as a standard server. Meinberg's SyncFire 1000 was developed to operate as a powerful NTP time server and does not provide the needed operation system to be deployed as a standard server.

Manual

The english manual is available as a PDF file: [7][Download \(PDF\)](#)

Links:

- [1] <http://www.meinberg.de/english/products/>
- [2] <http://www.meinberg.de/english/products/>
- [3] <http://www.meinberg.de/cgi-bin/mainv2/>
- [4] <http://www.meinbergglobal.com/english/products/gps-antenna-converter.htm>
- [5] <http://www.meinberg.de/english/products/gps-antenna-converter.htm>
- [6] <http://www.meinberg.de/english/products/ntp-time-server.htm>
- [7] <http://www.meinberg.de/download/docs/manuals/english/sync-fire-1000.pdf>