



## Meinberg Radio Clocks

Lange Wand 9  
31812 Bad Pyrmont, Germany  
Phone: +49 (5281) 9309-0  
Fax: +49 (5281) 9309-30  
<https://www.meinbergglobal.com>  
[info@meinberg.de](mailto:info@meinberg.de)

## SyncFire 1100: High-Performance NTP Time Server

The Meinberg SyncFire 1100 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 millions of NTP and SNTP clients.

### Key Features

- Selectable Reference Sources: GPS: Satellite receiver for the Global Positioning System 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 (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
- Meinberg GPS Antenna/Converter Unit connected with up to 300m of standard coaxial cable RG58
- Up to six independent RJ-45 ethernet interfaces 10/100/1000 MBit/s
- Max. supported NTP requests/second Multi-Core-NTP: up to 750,000 Multi Threading Support developed by Meinberg

## 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 or combined GPS/GLONASS 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.

The new SF1100 can be ordered with one of two CPU options: the 1.9GHz Quadcore Intel Xeon CPU or the 2.6GHz Octacore Intel Xeon CPU with Hyperthreading. The standard configuration offers two Gigabit interfaces, quad port Gigabit Ethernet or a dual port 10GE/SFP+ expansion cards can increase the number of physical interfaces to a maximum of 2x1GE+4x10GE or 10x1GE ports.

Depending on the selected CPU option and the number of physical network interfaces, a Meinberg SyncFire 1100 can handle up to 750,000 NTP requests per second. This makes the Meinberg SyncFire 1100 one of the world

## Characteristics

<b>Operating System</b>	Linux 4.x SMP
<b>Type of receiver</b>	12 channel GPS C/A-code receiver
<b>Type of antenna</b>	Remote powered [1] <a href="#">GPS antenna/converter unit</a> , up to 300m distance to antenna with RG58 and up to 700m distance with RG213 cable
<b>Display</b>	LC-Display, 4 x 20 characters
<b>Control elements</b>	Eight push buttons to set up basic network parameters and to change receiver settings
<b>Status info</b>	Four bicolor LEDs showing status of: <ul style="list-style-type: none"> <li>- reference time</li> <li>- time service</li> <li>- network</li> <li>- alarm</li> </ul>
<b>Network Interface</b>	<p><b>Standard:</b> 2 x 10/100/1000 MBit with RJ45 connector</p> <p><b>Available Options:</b></p> <p>* Additional network interface card with 4 x 10/100/1000 MBit - RJ45 jack or 2 x 10000 MBit - RJ45 jack</p>
<b>Power supply</b>	<p><b>Redundant power supply (hot-plug power supply unit)</b></p> <p>Rated voltage range: 100 - 240 V AC</p> <p>Frequency: 50 / 60Hz</p> <p>Effective power: 450 W</p> <p>Rated current: 8.5 A (100 V) / 3.5 A (240 V)</p>

<b>CPU</b>	1.9 GHz Intel® Xeon® Quadcore or 2.6 GHz Intel® Xeon® Octacore with HyperThreading® 8GB RAM, Diskless/Flash Memory Module
<b>Network protocols OSI Layer 4 (transport layer)</b>	TCP, UDP
<b>Network protocols OSI Layer 7 (application layer)</b>	TELNET, FTP, SSH (incl. SFTP, SCP), HTTP, HTTPS, SYSLOG, SNMP
<b>Internet Protocol (IP)</b>	IP v4, IP v6
<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 2030) MD5 Authentication and Autokey Key Management
<b>Time Protocol (TIME)</b>	Time Protocol (RFC 868)
<b>Daytime Protocol (DAYTIME)</b>	Daytime Protocol (RFC 867)
<b>IEC 61850</b>	Synchronization of IEC 61850 compliant devices by using SNTP
<b>Hypertext Transfer Protocol (HTTP)</b>	HTTP/HTTPS (RFC 2616)
<b>Secure Shell (SSH)</b>	SSH v1.3, SSH v1.5, SSH v2 (OpenSSH)
<b>Telnet</b>	Telnet (RFC 854-RFC 861)
<b>Simple Network Management Protocol (SNMP)</b>	SNMPv1 (RFC 1157), SNMPv2c (RFC 1901-1908), SNMP v3 (RFC 3411-3418)
<b>Form Factor</b>	19 Inch Server Rack 1HE/84TE 431 mm x 718 mm x 43 mm (W x D x H)
<b>Ambient temperature</b>	10°C ... 35°C
<b>Humidity</b>	10% ... 85%
<b>Scope of supply</b>	Included in delivery is our [1] <a href="#">GPS antenna incl. converter unit</a> , 20m GPS antenna cable (RG58) and product documentation.
<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 at 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 the product</b>	This product is fully RoHS compliant
<b>WEEE status of the product</b>	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.
<b>Additional Information</b>	Additional information about the Meinberg LANTIME family of NTP time servers and other LANTIME models can be found on the [2] <a href="#">LANTIME NTP Time Server Family Page</a>  <b>Note:</b> 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

There is no online manual available for this product: [3][Contact us](#)

#### Links:

[1] <https://www.meinbergglobal.com/english/products/gps-antenna-converter.htm>

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

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