



Meinberg Radio Clocks

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CPU-C15G2: Management and NTP Processor Module

This product is only compatible with Meinberg's line of modular **IMS LANTIME** systems.

Visit the [1][IMS Information Page](#) to learn more. As the central management and control element, the CPU module in an IMS system is responsible for management, configuration and alarm notifications. It additionally provides NTP and SNTP services on its network interfaces. The IMS-CPU model C15G2 comes with an integrated 10/100/1000 Base-T RJ45 port and an 1000Base-T with SFP connector, additional network ports can be added by installing LNE cards.

Key Features

- Synchronization of NTP and SNTP compatible clients
- Web User Interface (WebUI) for configuration and status monitoring
- Up to 25,000 NTP requests/second

Description

The IMS-CPU runs Meinberg's all new LTOS V7 firmware generation with an incredible feature set. The V7 network concept allows to configure up to 99 logical network interfaces and assign them to one of the physical network ports or a link aggregation group. Network services like HTTP, SSH or NTP can be individually enabled/disabled for each virtual interface. Each CPU can manage up to 99 physical ports in theory and offers enterprise features like VLAN (IEEE 802.1Q), QoS/traffic prioritization (DSCP and IEEE802.1p) as well as full IPv6 support. The powerful web based configuration interface provides access to all important LTOS V7 parameters and functions. Multiple firmware versions can be installed on one unit, making it easy to try out new versions and roll back to a previous version with one mouse click. Backing up system configuration is easier than ever with the V7 capability to store multiple revisions of the configuration on a unit and offer different ways to upload and download configuration sets.

The web GUI, accessible using both HTTP and HTTPS, is accompanied by the command line interface (CLI). Administrators can log in via SSH, Telnet or the serial console port and, with the appropriate access level, will find a standard shell environment with full script support and hundreds of well known Unix commands. A full featured SNMP management service supporting SNMP V1, V2c and V3 (auth and privacy) including a large selection of standard MIBs and a Meinberg specific enterprise MIB offers a proven way to integrate the system into an existing network management system. A USB port allows to backup/restore configuration sets using a USB memory stick and can be used to install a new firmware version on the device. If required, both the USB port and the access to the LC menu can be disabled.

Characteristics

Processor Type	Intel® Atom
Network Interface	2 Network ports: 1 x 10/100/1000Base-T RJ45 1 x 1000Base-T SFP Slot Up to 25,000 NTP requests/second

Module Connectors

Serial Interface:
RJ45 connector
console: 38400 / 8N1,
connection via CAB-CONSOLE cable

USB Port:

- * install firmware upgrades
- * backup and restore configuration files
- * copy security keys
- * lock / unlock front keys

Universal Serial Bus (USB) Ports	1x USB Port: <ul style="list-style-type: none">- install firmware upgrades- backup and restore configuration files- copy security keys- lock/unlock front keys
Operating System of the SBC	GNU/Linux 4.x
Network Protocols OSI Layer 4 (Transport Layer)	TCP, UDP
Network Protocols OSI Layer 7 (Application Layer)	Telnet, FTP, SSH (including SFTP, SCP), HTTP, HTTPS, syslog, SNMP
Internet Protocol (IP)	IPv4, IPv6
Network Autoconfiguration Support	IPv4: Dynamic Host Configuration Protocol - DHCP (RFC 2131) IPv6: Dynamic Host Configuration Protocol - DHCPv6 (RFC 3315) and Autoconfiguration Networking - AUTOCONF (RFC 2462)
Network Time Protocol (NTP)	NTP v2 (RFC 1119), NTP v3 (RFC 1305), NTP v4 (RFC 5905) SNTP v3 (RFC 1769), SNTP v4 (RFC 4330)
Parallel Redundancy Protocol (PRP)	PRP (IEC 62439-3)
Time Protocol (TIME)	Time Protocol (RFC 868)
IEC 61850	Synchronization of IEC 61850-compliant devices 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)
Supported Temperature	Operational: 0 - 50 °C (32 - 122 °F) Storage: -20 - 70 °C (-4 - 158 °F)
Supported Humidity	Max. 85 % (non-condensing) at 40 °C
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 from 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 Product	This product is fully RoHS-compliant.
WEEE Status of Product	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.

Manual

The English manual is available as a PDF file: [2][Download \(PDF\)](#)

Links:

[1] <https://www.meinbergglobal.com/english/products/modular-sync-system.htm>

[2] <https://www.meinbergglobal.com/download/docs/manuals/english/ims-lan-cpu-q7.pdf>