

DTS 4138 timeserver for NTP

Hint: Refer to leaflet for more detailed information.

Additional parts and options:

GPS 4500: GPS receiver
SP 4500: lightning protector
DTS 2440: audio time announcer and signal generator
DTS 2340: IRIG-B distributor
UPS DTS: battery pack power reserve
MOBA-NMS: configuration, management and supervision software

The **DTS 4138.timeserver** is contained in a 19 " housing for rack mounting (1U). Main information, such as current time & date, synchronisation status, current network IP-address, power & alarm status, are displayed by LED's and on a LCD display (2 lines of 16 characters).

The DTS 4138 has a built in NTP Server which can be configured in server, client or combined client-server mode in order to provide NTP (network time protocol) time distribution services in unicast or multicast modes over Ethernet LAN / WAN network. It can operate as a NTP time zone server by providing up to 20 time zones into encoded NTP-frame for world time clock synchronisation. In addition it provides the following synchronisation outputs: 1x RS232/RS485 configurable time telegram, 1x IRIG-B in both analog and DC level and 1x programmable pulse/frequencies.

The network parameters (IP and gateway addresses) of the master clock can be managed by DHCP protocol (dynamic) from a server or by SSH protocols (static). Upon login/password identification, the master clock supports management and configuration through network remote access by MOBA-NMS software or via SNMP & encrypted SSH protocols.

The DTS 4138.timeserver can be synchronized by a GPS receiver, by IRIG-B time code or NTP. It can also operate in stand-alone mode thanks an embedded high quality oscillator (DTS 4138.timeserver: TCXO, DTS 4139.timeserver: OCXO) (in case of time source fail).

High degree of system redundancy by connecting two DTS 4138 via fibre-optic link:

- high availability
- master-slave operation with automatic switch over in case of an error

The DTS 4138.timeserver manage automatic and autonomous alarm notification by SNMP (alarm and alive traps), SMTP (e-mail) protocols and over embedded alarm relay.

Outputs: ⇒ 2x LAN, NTP server (on both LAN ports , > 1500 req/s totally, 10/100 Mbit/s, RJ45)
 ⇒ 1x IRIG-B, with analogue (BNC) and DC level
 ⇒ 1x programmable DCF/pulse/frequency output
 ⇒ 1x serial interface RS 232 / 422 for configurable serial time telegram
 ⇒ 1x DCF current loop
 ⇒ 1x alarm: potential free opening contact (embedded alarm relay)

Synchronisation: GPS (DCF), IRIG-B or NTP protocol.

Operation: communication over LAN/WAN (MOBA-NMS, SNMP, SSH or Telnet)

Monitoring: LEDs: power, synchronization, alarm. Push button allowing to scroll information (status and alarm) on the LCD display.

Housing: metal 19 "rack mounting, like IT equipment

Dimensions: W x H x D in mm: 483 x 44 x 125

Power supply: Redundant: 2x 24 VDC, +20% / - 10%, max. 15 W