**DTS 4801 master clock for NTP**

Hint: Refer to leaflet for more detailed information.

Additional parts and options:

GPS 4500: GPS receiver

SP 4500: lightning protector

UPS DTS: battery pack power reserve

ECO ETC: change over unit for redundant system

KR461 & KR465: load switching relay piloted by

 Mobaline

MOBA-NMS: configuration, management and

 supervision software

The master clock **DTS 4801** 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 network master clock 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 dedicated slave clock synchronisation outputs: 1x RS485 serial and 1x selectable MOBALine or impuls with automatic current limitation upon overload detection.

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. In additional a service port located on the front panel is available for direct configuration access.

The master clock can be synchronized by a GPS receiver or serial time telegram. It can also operate in stand alone mode thanks an embedded real time clock.

The master clock manage automatic and autonomous alarm notification by SNMP (alarm and alive traps), SMTP (e-mail) protocols and over embedded alarm relay. Four general-purpose inputs contact’s detection can be used for alarm triggering (fire, intrusion sensors …).

Outputs: ⇨ 1x 10/100 Mbit/s baseT-8P8C (RJ-45 Ethernet)

 ⇨ 1x slave clock : MOBALine (multi time-zone) or impulse line, for up to 100 slave clocks upon 400 meters over 1.5mm2 2-wires cable.

* 1x slave clock: RS 485 line for up to 31 supervised clocks
* 1x synthetic DCF 77 time code
* 1x serial interface RS 232 / 422 for configurable serial time telegram
* 1x alarm: free potential closing contact (embedded alarm relay)

Synchronisation: GPS receiver, serial time telegram or NTP protocol.

Operation: communication over LAN/WAN (MOBA-NMS, SNMP, SSH or Telnet) or via serial interface RS 232 (PC terminal)

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: L x W x H in mm: 483 x 44 x 125

Power supply:  85-250 VAC, 50/60 Hz or 22-30 VDC, < 30 VA

**DTS 4801 master clock for MOBALINE**

Hint: Refer to leaflet for more detailed information.

Additional parts and options:

GPS 4500: GPS receiver

SP 4500: lightning protector

UPS DTS: battery pack power reserve

ECO ETC: change over unit for redundant system

KR461 & KR465: load switching relay piloted by

 Mobaline

The master clock **DTS 4801** 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).

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The master clock can be synchronized by a GPS receiver or serial time telegram. It can also operate in stand alone mode thanks an embedded real time clock.

The master clock manage automatic and autonomous alarm notification by SNMP (alarm and alive traps), SMTP (e-mail) protocols and over embedded alarm relay. Four general-purpose inputs contact’s detection can be used for alarm triggering (fire, intrusion sensors …).

Specific feature provided for Mobaline synchronisation output:

* automatic and autonomous slave clock management regarding daylight savings & power outage thanks to Mobaline self setting protocol.
* capability to act as time zone server (up to 15 time zone into encoded Mobaline-frame) for world time clock synchronization.
* daily computed twilight illumination switching function according to latitude and longitude with user definable “before” and “after” additional duration for slave clock backlight control.



* Control of up to 63 settings-independents groups (channels) of “load switching” devices (KR relay series) with respect to flexible multi-scheduling program (“weekly periodic” and/or “calendar date dependent” management upon exception/priority levels). Program edition by "Switch Editor software" (windows).

Specific feature provided for impulse synchronisation output:

* automatic and autonomous slave clock management regarding daylight savings, power outage thanks to electronic impulse storage management.

Outputs: ⇨ 1x 10/100 Mbit/s baseT-8P8C (RJ-45 Ethernet)

 ⇨ 1x slave clock : MOBALine (multi time-zone) or impulse line, for up to 100 slave clocks upon 400 meters over 1.5mm2 2-wires cable.

* 1x slave clock: RS 485 line for up to 31 supervised clocks
* 1x synthetic DCF 77 time code
* 1x serial interface RS 232 / 422 for configurable serial time telegram
* 1x alarm: free potential closing contact (embedded alarm relay)

Synchronisation: GPS receiver, serial time telegram or NTP protocol.

Operation: communication over LAN/WAN (SNMP, SSH or Telnet) or via serial interface RS 232 (PC terminal)

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: L x W x H in mm: 483 x 44 x 125

Power supply: 85-250 VAC, 50/60 Hz or 22-30 VDC, < 30 VA