

MOD6ETNT45A Manual

data logger with ethernet and SD card for Tarom4545

The logger MOD6ETNT45A collects all system parameters given by the charge regulator Tarom4545 and stores them onto the internal SD card.

The collected data files will be sent via FTP to the internet in user defined intervals.

The system status is reported by the Tarom4545 each minute. There are 26 variables which are provided as ASCII text on the serial output (UART) of the Tarom4545. For each day the logger creates a file with 1440 text lines and names it like "mmdd.txt".

The files are organized in a directory named with the actual year, , for example "16/0104.txt".

Every day on midnight the actual data file will be transferred to the users FTP site. The access code for the FTP site has to be present on the SD card. The file "FTP.INI" contains three lines with the FTP server name, user name and password. For example:

```
ftp.my-site-name.com  
USER myusername  
PASS mypassword
```

The power supply of the MOD6ETNT45A logger comes from a 12V or 24V battery. It needs about 1W.

Installation

UART

- activate the UART/RS232 output option at the Tarom4545 charge regulator:

see menu: / system settings / open UART/RS232 /  on

- connect the UART outputs of the Tarom4545 with UART inputs of the logger. Connect the Tarom "TX" with the logger "RX" and the Tarom "RX" with the logger "TX" ! (TX means output RX means input). Connect both UART ground terminals.

Power supply

- connect the power terminals of the logger to the battery. Watch for polarity, connect the logger plus input with the battery plus pole and the negative input with battery minus. The input is protected against reverse polarity.

Operation

After installation the green LED on the logger should stay on for about one minute. After receiving the first data line from the Tarom UART the LED will go off. Each minute the data reception and writing on the SD card will be confirmed by a flashing LED.

The first two data receptions of the logger will be sent immediately via the ethernet to the FTP server. This is for checking the ethernet connection. After the installation period the ethernet will be used only once per day.

During a missing ethernet connection, the data logging onto the SD card continues. A try to reconnect will be done automatically.

If the serial connection to the Tarom4545 UART fails for longer than 180 seconds, there will be

an error message send to the FTP site in the file "UART.err".

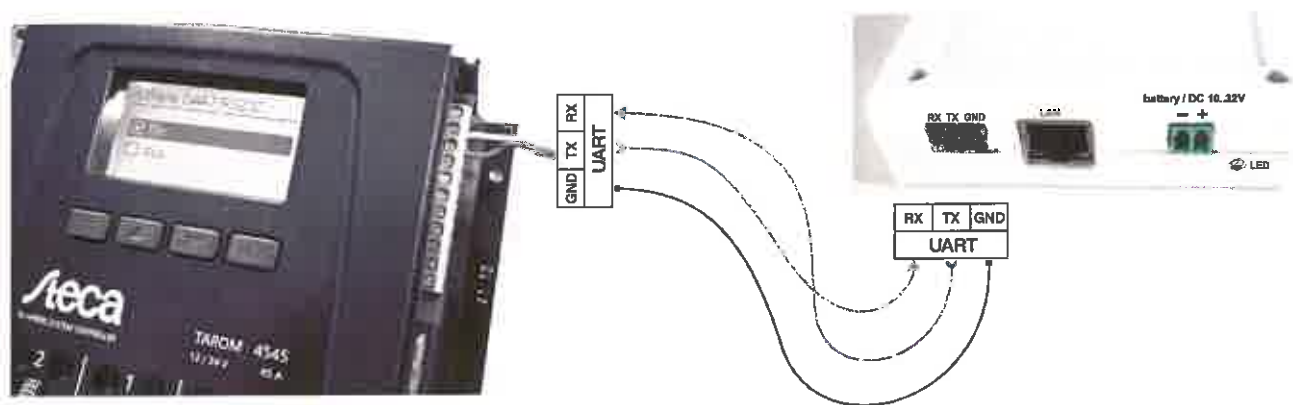
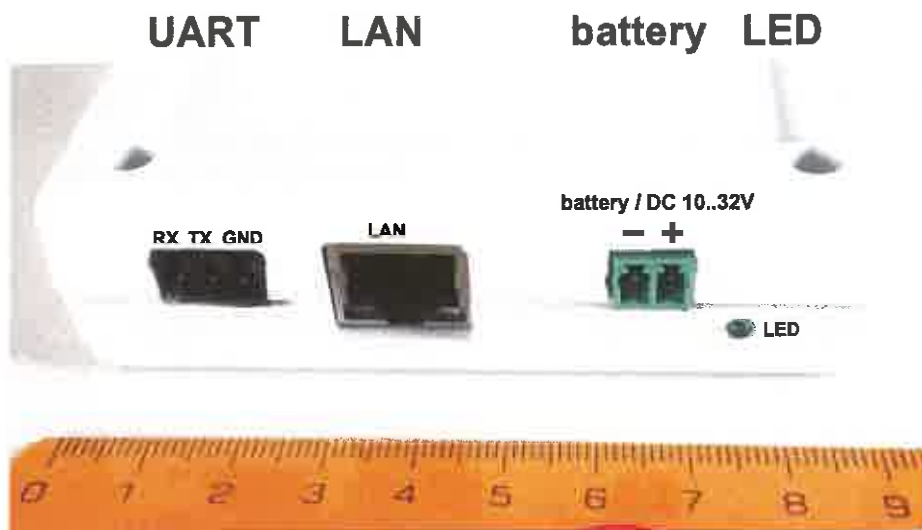
If the LED stays on continuously there is a problem with the serial date reception.
If the LED blinks several times there is a problem with the ethernet connection.
During regular operation the LED blinks only once per minute.

technical data	MOD6ETNT45A
power supply	10V .. 32V; 100mA..50mA
interface	
- UART input from Tarom4545	GND, RX
- Ethernet output	max 100MBit
- SD card	1 .. 8GB
one data file per day, ASCII	ca. 150 kB
LED indication for UART and ethernet	
protection	IP22
case	ABS
	22mm
dimensions	160 x 95 x 30mm; 150g

example data lines:

```
1;2016/03/10;08:06;12.0;12.5;#;55.0;#;0.0;0.0;#;0.0;0.0;0.0;0.0;19.8;0;B;1;0;0;0.1;0.7;0.0;0.0;0;5075
1;2016/03/10;08:07;12.0;12.5;#;55.0;#;0.0;0.0;#;0.0;0.0;0.0;0.0;19.8;0;B;1;0;0;0.1;0.7;0.0;0.0;0;0F42
```

See the Tarom4545 manual, part 18.3.1, for the field definitions



UART/Serial connection Tarom4545 and MOD6ETNT45A

