

# TELEGRAPH LOGGER

TLO

The sm electrics telegraph logger has been designed to replace an outdated bell logger (command printer). The command list of the telegraph logger is able to represent up to 60000 commands, before the list gets refreshed. The telegraph logger will periodically execute an internal backup off the command list which will be exported to an excel sheet. All files are named with the specific timestamp and kept in an internal system folder. In order to export all stored files from the telegraph logger to an external USB storage, the user interface provides a USB backup button. With single action, the telegraph logger will create a new excel sheet with the latest manoeuvre and then export all files automatically to the mounted pen drive. Moreover, the telegraph logger provides a password protected settings menu to change the description of each lever location and the current UTC offset. In order to open the on-device user manual, a specific button is located on the user interface.



## APPLICATION

- binary inputs
- various analog inputs
- NMEA inputs

The TLO has been designed to indicate on a 15,6" 9:16 (upright) coloured touch panel PC the given manoeuvre commands from Bridge Telegraph unit as well as the responded commands from Engine Room Telegraph. Each command is shown in a single line with a time stamp clearly indicated what telegraph has been represented. Moreover, the telegraph logger plus can read binary inputs and analog inputs (e.g. PT100, 0-10V, Resistor) from its external IO modules. All input channels can be individually adapted to specific requirements within the on-screen menu.

Around 35 lines fill a screen. The latest command is shown on the bottom of the screen. In case older commands shall be displayed, the built-in in scroll function can be used. A defined number of total commands are available on the screen.

The telegraph logger is connected to the A067 mtbus controller and is sending a full system state telegram to the VDR every time the system state changes or the time interval of 10s expires. That NMEA telegram is linked to the telegraph logger as RS422 serial communication. The logger is analysing permanently the telegram and is generating a new line on the display only in case a telegraph manoeuvre command has been given and the state hasn't been changed within the last 3 seconds or one of the external analog/binary inputs changes its state within the defined range.



## DATA & FEATURES

- Coloured full graphic touch panel PC (255x404x83mm – upright - 2,85kg - fanless)
- modern SSD storage technology
- Power consumption: max. 37,5W (1,5Amp)
- On-device user manual available for immediate user support
- Single action storage to USB flash drive (long term storage)
- Black-out-safe operation

## PERIPHERY EQUIPMENT

### TELEGRAPH LOGGER Plus

991439



#### TLO | TLO PLUS 210.24.0.0

- 15,6" touch panel PC
- inclusive IO module
- NMEA input
- 32 binary inputs, 8 analogue value inputs

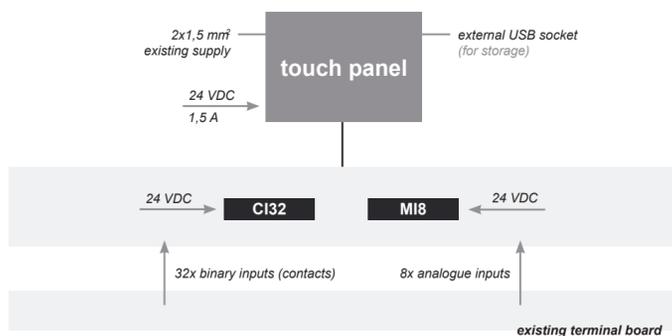
### ADDITIONAL INPUTS



#### TLO

- analogue inputs available (4 - 20mA, 0 - 10V, PT100, resistor/potentiometer, etc.)
- binary inputs available

## TYPICAL SYSTEM COMPOSITION



## adjustments

Via a password protected time setting menu the operator is able to adjust the system time very easily. The time stamp is based upon that system time.

The TLO plus is generating an XLS file (.XLS) within a defined period of time, stored on a modern internal „solid state drive“. In order to export all stored files from the telegraph logger to an external USB storage, the user interface provides a USB backup button. Once pressed, the TLO will export all files to the mounted pen drive.

