hobré instruments

Hobré Exi Terminal
for local control of the TDL with Photo Acoustic

The Hobré TDL analyzer with photo acoustic detection is a reliable and virtually maintenance free online process analyzer focussing on the analysis of H2S, CO2, H2O and CH4 in a range from low ppm level up to high percent levels.

Technology wise the Hobré TDL is a big step forward as it offers a combination of features not available with any other technology on the market. No moving parts, full separation of photo acoustic measuring cell and electronics, stable calibration and close to zero maintenance are the dominant features. Supply to ATEX, IEC Ex and CSA classification is all possible.

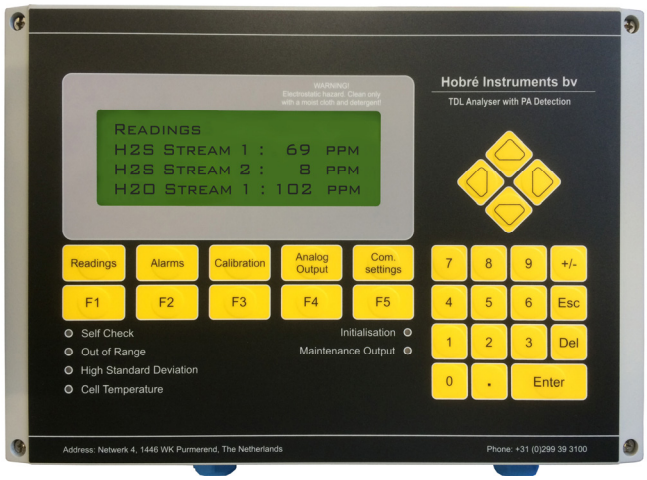
So far control of the TDL analyzer has been through the TMON service software tool using a PC with the objective to minimise field interventions. Now an optional Exi terminal is available for local readings, display of alarms and validation or calibration of the analyser.

The intrinsically safe field terminal provides a connection between the analyser and operator through a liquid crystal display, a foil keyboard and a buzzer. A RS485 interface with MODBUS protocol offers an optimal flexibility in installation. The Ex terminal can be installed on the Hobré TDL analyzers explosion proof electronics box or anywhere else since the housing of the unit is IP65 protected.

SPECIFICATION

For displaying information, the terminal is equipped with a 4-line display, 20 characters per line, and background lighting. possible The size of the displayed characters is 4.84 x 9.22 mm, which can be clearly seen even from greater distance. Size of the press-buttons is 15 x 15 mm, which can be easily handled even by those who wear protective gloves. A washable, chemical-resistant front panel withstands the chemicals that are generally used in the chemical industry. As a result of its enclosure with IP 65 protection and of the wide operating temperature range (-20 - +50 °C) this device is ideally suited for field usage too.

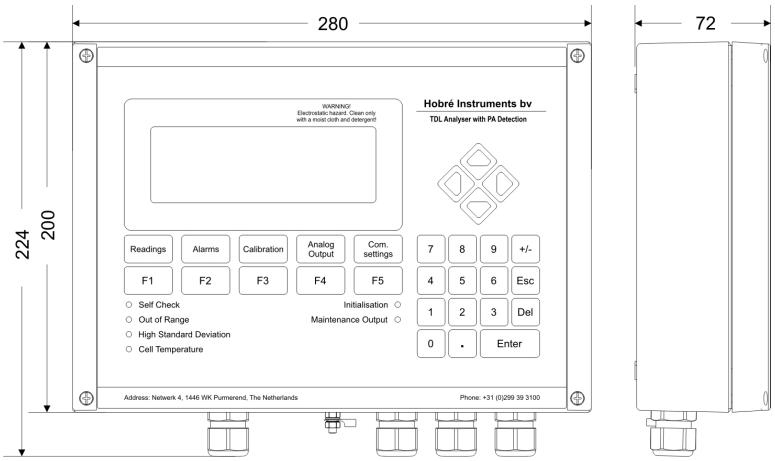
The software of the Exi terminal is designed in such a way that we can configure the unit for each application; single stream, multi stream or multi component. Control of two Hobré TDL analysers with a single Exi terminal is a possibility as well.



TERMINAL FUNTIONS

- Selectable display images by the operator which contain the needed data (numeric / text values).
- Editable parameters by the operator
- Alarms
- Command / function buttons
- Indicator LEDs

TECHNICAL SPECIFICATION



Intrinsically safety data	
Certification:	14 ATEX 0008 X
Marking:	II 2 G Ex ia IIC T4 Gb (-20 °C ≤ Ta ≤ 50 °C)
Power supplies	
CPU power supply:	8-12 V, < 200 mA
LED BL power supply	8-10 V, < 130 mA
Reverse polarity protection:	Yes
Communication interface:	
Interface:	galvanic isolated RS485
Communication protocol:	MODBUS RTU / ASCII, MASTER / SLAVE
Display	
Display unit:	4 x 20 characters alphanumeric LCD
Character height:	9.22 mm
Backlight:	light green LED
Keyboard	
Number of buttons:	29 push-buttons
Keyboard type:	foil keyboard on carrier plate
LEDs	
Number of LEDs:	6 bi-color LEDs (red, green)
Sound	
Speaker:	Piezo buzzer
Environmental conditions:	
Operating temperature range:	-20 - +50 °C
Storing temperature range:	-25 - +70 °C

Electromagnetic compatibility (EMC)

Meets the requirements of EN 61326-1:2013 standard (Electrical equipment for measurement, control and laboratory use, Industrial electromagnetic environment).

General data:	
Housing:	enclosed aluminum box (AlSi12), installable as a field instrument to the wall or any flat surface
Dimensions:	224 x 280 x 71 mm (height, width, depth)
Weight:	~2 kg
Protection:	IP 65
Shock protection:	PELV (Protected Extra-Low Voltage)
Mounting position:	wall-mounted, any position
Cable glands:	4 pcs PG11 (bottom of box)
Connection:	Protective Earth connector screw (bottom of box), plug-in terminal blocks (inside of box)
Connection cable:	0.5-1.5 mm^2 cross-section

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