

## TERMEX 230

**TERMEX 230** is an intrinsically safe graphics panel. With its versatile functions and interfaces, it is ideally suited as control and display panel or as machine panel. By use of **TERMEXpro**, the graphical Windows software package for TERMEX units, project design and parameterization can be done easily and cost efficient. Several optional connections for barcode readers, scales, expansion keyboards and digital inputs and outputs are available as options.

<b>Ex-classification according to ATEX 95, directive 94/9/EG:</b>	
Type of protection:	Intrinsically safe (acc. to EN 50020), EEx ib IIC T4 II 2G EEx ib IIC T4 DMT 02 ATEX E 239  Dust explosion proof acc. to EN50281 II 3 D X T135°C IP65 in case of mounting ABG-1 or ABG-3
<b>Degree of protection acc. to EN60529/IEC 529:</b>	
Degree of protection front panel:	IP 65
Degree of protection rear panel:	IP 20
installed in polyester case ABG-P:	IP 54
installed in stainless steel case ABG-V2A:	IP 65
<b>Calibration certificate:</b>	
Calibration certificate TERMEX 230:	Acc. to DIN EN 45501 No. D09-95.32 Addendum 2 As a module for class III and IIII scales
<b>Display:</b>	
Resolution:	240 x 128 pixels, 4 standard fonts, additional fonts can be loaded 12 lines x 40 characters, character height 4.5 mm 8 lines x 26 characters, character height 5.5 mm 4 lines x 20 characters, character height 12 mm 4 lines x 13 characters, character height 12 mm Text and graphics freely designable Background bitmaps can be loaded Pixels, lines, blocks, borders and bar graphs can be designed.  LCD, supertwisted nematic, with or without backlight Active display area: 148 mm x 74 mm
<b>Front plate:</b>	
Material:	Anodized aluminium Display cutout with non-reflecting glass cover Polyester front foil, printed on reverse
Keyboard:	Short-stroke keys Number block 5 function keys (dual assignment with Shift key) Either standard layout or customized layout with insertable label strips (ex works)
LEDs: ON COM ! A..Z	to indicate the power supply to indicate a host communication fault to indicate that messages are pending to indicate that alphabetical input modes are allowed
<b>Project design:</b>	
Configuration:	Integrated setup menu for setting all device parameters
Project design data:	Downloadable from a PC via a serial port PC port (RS232) connected to mains buffer stage, type ENT-DC-xxx

<b>Ports:</b>	
Port parameters : (TERMEX <--> ENT <--> host)	TERMEX <--> ENT: 20 mA current loop, passive/passive ENT <--> host: RS232 / 20 mA current loop, active/passive, settable / optional RS485 1200 - 19,200 baud, settable (setup) Parity: even, odd, mark, space, none (setup) 7 / 8 data bits, settable (setup) 1 / 2 stop bits, settable (setup) Default: 9600 baud, 8 data bits, even parity, 1 stop bit
Interface protocols:	MPI Siemens S7 Profibus DP, Siemens /S7 3964R/RK512, various AS511, Siemens S5 MODBUS/RTU slave, various MODBUS/RTU master, various DF1, Allen-Bradley ASCII EXTEC
Peripheral interfaces:	Cable scanner EX-Dragon-D101 Radio scanner EX-Dragon-M101 Expansion keyboard K36/KL36 Various container and platform weighing Digital input / output modules
<b>Firmware and functional test:</b>	
Firmware:	The firmware is stored in a FLASH chip and is updatable. The latest version can be downloaded from the Pepperl + Fuchs web site. The firmware can be loaded onto TERMEX 230 terminal using the TERMEXpro Loader software.
Functional test:	Integrated detection of all hardware components during start/reset and self-test.
<b>Dimensions weight:</b>	
Front plate (WxH):	288x144mm
Cutout (WxH):	277x137mm
Mounting depth:	72mm incl. terminals, without connector
Weight:	Approx. 1,5 kg
<b>Ambient conditions:</b>	
Operation:	-20°C - +50°C
Storage:	-20°C - +70°C
Rel. humidity:	0% - 75%, without condensation, 48h endurance test
<b>EMC declaration</b>	
The manufacturer, Pepperl+Fuchs, certifies that this product conforms to the relevant EMC directive.	
Interference emission:	EN 55011 : 1998 + A1 :1999
Noise immunity:	EN 61000-6-2 : 1999
<b>Accessories:</b>	
Digital input/output modules:	Interface modules can be integrated into the TERMEX terminals configured with 3 digital inputs and 3 digital outputs
Expansion keyboard K36/KL36:	The TERMEX 230 can be equipped either with a TERMEX K36 keyboard or with a TEMREX KL36 with LEDs
Stainless Steel enclosure, wall mount:	Dimensions in mm: 346 x 210 x 104
Stainless steel enclosure, desktop mount:	Dimensions in mm: 316 x 210 x 104
Plastic enclosure:	Dimensions in mm: 340,5 x 170 x 91
Further housings on request!	