



## EM3712 | Pressure measuring terminal

The EtherCAT Terminal system is extended with pressure measuring terminals for recording differential and relative pressures. In a similar way to electrical signal acquisition, an EtherCAT Terminal with 24 mm width is used for pressure measurement. The compact design and simple connection system supports space-saving and quick installation. Additional measuring instruments are unnecessary.

The pressure measuring terminals of the EM37xx series are divided into two groups: differential pressure measurement (measurement between two terminals) and relative pressure measurement (measurement relative to the environment). The EtherCAT Terminals can be used for measuring the pressure or as a substitute for a pressure switch. The pressure value in the controller makes it possible to store the switching threshold as a parameter for a logic link. Manual setting at the pressure switch in the application is therefore no longer required.

The EM3712 enables direct measurement of the pressure value relative to the environment (relative pressure measurement). In contrast to the EM3702, with the EM3712 negative pressure values, as differential values relative to ambient, are also permitted. The measured values are available as 16-bit values. The status LEDs indicate proper function or errors such as over-range. The pressure measurement terminal is not suitable for the measurement of aggressive gases.

Technical data	EM3712
Technology	relative pressure measurement
Number of inputs	2
Measuring error	3 % (relative to full scale value)
Measuring range	-1000...+1000 hPa (-1...+1 bar)
Max. overload	5000 hPa (5 bar)
Resolution	1 hPa (1 mbar) per digit
Measuring speed	4 ms typ.
Current consumption E-bus	typ. 70 mA
Current consumption power contacts	– (no power contacts)
Bit width in the process image	4 byte input/output per channel
Medium	non-aggressive gases
Operating/storage temperature	0...+55 °C/-25...+85 °C
Relative humidity	95 %, no condensation
Vibration/shock resistance	conforms to EN 60068-2-6/EN 60068-2-27
EMC immunity/emission	conforms to EN 61000-6-2/EN 61000-6-4
Protect. class/installation pos.	IP 20/variable
Approvals	CE, UL

Related products	
<b>EM3701</b>	1-channel differential pressure measuring terminal -100...+100 hPa (-100...+100 mbar)
<b>EM3702</b>	2-channel relative pressure measuring terminal 7500 hPa (7.5 bar)