

I/O expansion modules

Three I/O expansion modules are available, dedicated to M171 Optimized logic controllers.

- They are used to increase the number of I/O up to 44 on M171 Optimized logic controllers
- Expanded I/O types are digital and analog
- They are connected via the LAN expansion bus on M171 Optimized logic controllers

Compatibility between logic controllers and I/O expansion modules

Logic controller type	Reference	Compatible I/O expansion module (reference)
M171 Optimized	TM171OBM14R, TM171OD14R, TM171ODM14R	TM171EO14R
	TM171OBM22R, TM171OD22R, TM171ODM22R, TM171ODM22S, TM171OF22R, TM171OFM22R	TM171EO15R, TM171EO22R

TM171EO●●R expansion modules (1)

35 mm/1.38 in rail mounting

- 1 Service port (TTL)
- 2 Wired connector for removable terminal block for Modbus SL
- 3 Connector for removable terminal block for digital outputs
- 4 Wired connector for removable terminal block for power supply (12-24 V ~ or 24 V ---),
- 5 Wired connector for low voltage I/O
- 6 Clip for 35 mm/1.38 in rail mounting
- 7 Wired connector for removable terminal block for analog outputs
- 8 Wired connector for removable terminal block for LAN expansion bus

(1) Removable terminal blocks to be ordered separately, except for **TM171EO14R**.

I/O expansion modules

35 mm/1.38 in rail mounting

No. of I/O	Number and type of channels	Compatibility	Embedded communication connection	Reference	Weight kg/lb
Inputs	Outputs				
14	2 digital inputs: 2 open collector or digital inputs (1) 5 configurable analog inputs: ■ 3 NTC or digital inputs ■ 2 NTC, or 0-20 mA, or 4-20 mA, or 0-10 V, or 0-5 V, or 0-1 V, or digital inputs	4 digital outputs: ■ 3 SPST (2 A, 230 V ~) with the same common ■ 1 SPDT (2 A, 230 V ~) 5 analog outputs: ■ 2 open collector for 12 V PWM/PPM or digital inputs (1) ■ 2 x 0-10 V ■ 1 x 4-20 mA	TM171OBM14R, TM171OD14R, TM171ODM14R	■ 1 LAN expansion bus TM171EO14R	0.190/ 0.420
15	6 digital inputs: volt-free 3 analog inputs: NTC or digital inputs	4 digital outputs: ■ 3 2 A, 250 V ~ ■ 1 open collector 2 analog outputs: open collector (PPM/PWM)	TM171OBM22R, TM171OD22R, TM171ODM22R, TM171ODM22S, TM171OF22R, TM171OFM22R	■ 1 LAN expansion bus TM171EO15R	0.190/ 0.420
22	6 digital inputs: volt-free 5 analog inputs: ■ 3 NTC or digital inputs ■ 2 NTC, or 0-20 mA, or 4-20 mA, or 0-10 V, or digital inputs	6 digital outputs: ■ 5 2 A, 250 V ~ ■ 1 open collector 5 analog outputs: ■ 2 open collector (PPM/PWM) ■ 3 x 0-10 V	TM171OBM22R, TM171OD22R, TM171ODM22R, TM171ODM22S, TM171OF22R, TM171OFM22R	■ 1 LAN expansion bus TM171EO22R	0.190/ 0.420

Accessories for I/O expansion modules

Designation	Description	Cable length (m/ft.)	Unit reference	Weight kg/lb
Accessories to be ordered separately				
Analog output connector (0-10 V outputs) Sold in lots of 5 (item 1)	Cordset equipped with a 4-pin connector at one end	1/3.3	TM171ACB4OAO1M	0.075/ 0.170
		2/6.6	TM171ACB4OAO2M	0.125/ 0.280
Low voltage connector Sold in lots of 5 (item 2)	Screw terminal block and a cordset equipped with a 20-pin connector at one end	1/3.3	TM171ACB4OI1M	0.575/ 1.270
		2/ 6.6	TM171ACB4OI2M	1.120/ 2.470
Accessory – Supplied with each expansion module				
LAN expansion bus connector Sold in lots of 5 (item 3)	Cordset equipped with a 3-pin connector at each end	2/6.6	TM171ACB4OLAN	0.060/ 0.130

(1) On the same channel: 2 digital inputs or 2 analog outputs (depending on the configuration).

(2) Minimum set for operating controllers.



Connection accessories (2) for expansion modules:
TM171EO15R, M171EO22R