

21700151	DATA SHEET	
Valid from: 10.02.2025	ETHERLINE® GUARD PM02TWA	

Description

- ETHERLINE® GUARD enables lifetime monitoring of data lines (100Base-TX) with focus on dynamic applications
- Feedback of the expected service life via status LED
- Alarm limit value individually adjustable (life time 99 - 50 %)
- Compact design, also suitable for use in decentralized control cabinets (mounting on DIN rail possible)
- Suitable for integration into IIoT structures via MQTT interface (including status/data evaluation, settings (WiFi-configuration), updates)



General characteristics

Interfaces & Buttons

LAN: 1x Antenna connector SMA jack, reverse polarity, IEEE802.11b/g/n, HTTPS, MQTT V3.1.1
Frequency bands: EU (2,412 GHz - 2,472 GHz, channel 1-11)

Transmitting power: max. 19.22 dBm
Operation modes: Access Point, Client
Data security: WPA2

Transmission rate: up to 54 Mbit/s

DATA: 2x RJ45: 100BaseTX

SET-Button: Setting of various functions

SD-Slot: 1x microSDHC (FAT32, max. 32 GByte)

LEDs: PWR (Power), STATUS (Status), WIFI (WiFi connected)

Ambient temp.: -25°C to +65°C (-13°F to 149°F)
transport - and storage temp.: -40°C to +85°C (-40°F to 185°F)

95 % (non-condensing)

2

12.23 years @ MIL-HDBK-217F

>= 2 m

Status indicators

Temperature range

Relative humidity (max.)

Pollution degree

MTBF (mean time between failures)

Minimum length of the monitored line

Variation

Article	Description	Type
21700151	ETHERLINE GUARD M02TWA	WLAN

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Power requirements

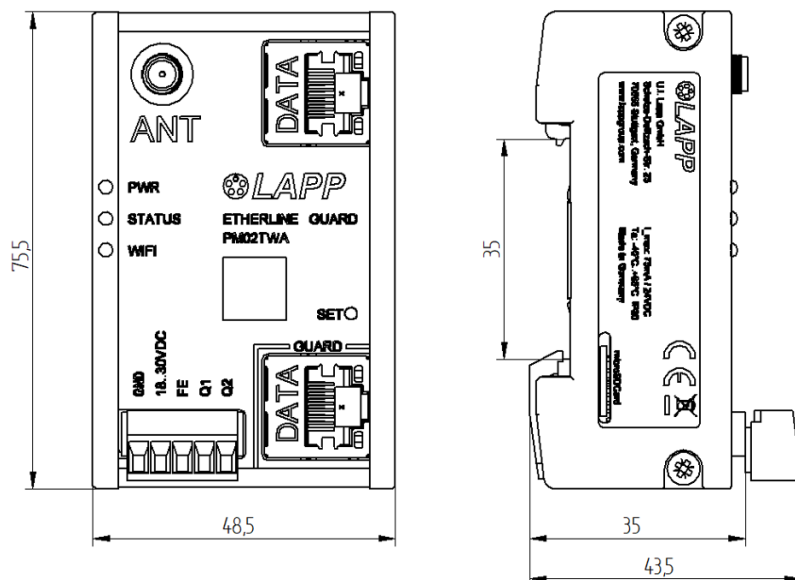
Connection	5-pole terminal block: GND, VCC, FE, Q1, Q2
Reverse Polarity protection	present
Input voltage	24 V DC (18-30V DC, SELV and limited energy circuit)
Power Consumption (max.)	2.16 W
Input current (max.) @ +24 V DC	90 mA (without load on Q1, Q2)
Outputs (Q1 / Q2)	Q1: Push-Pull (NO) / Q2: Push-Pull (PWM)
	Max. current: 0.2 A
	overload voltage protection: present
	short circuit protection: present

Physical properties

IP class (acc. EN 60529)	IP20
Protection class (acc. DIN EN 61140)	III
Weight	0.11 kg
Installation	Mounting on DIN-rail (acc. DIN EN 60715)

Technical drawing

Dimensional drawing



Standards and approvals

EMC	DIN EN 61000-6-2
	DIN EN 61000-6-4
Vibration	acc. DIN EN 60068-2-6
Shock	acc. DIN EN 60068-2-27
Free fall	acc. DIN EN 60068-2-31
Approvals	CE
	UL (E331560)
	FCC

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Application range

In 100Base-TX Ethernet-based networks in the field of automation, where transmission that is insensitive to interference must be ensured.

Note

Photographs are not to scale and do not represent detailed images of the respective products.

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