


21700151	<b>DATA SHEET</b>	
Valid from: 25.11.2022	<b>ETHERLINE® GUARD PM02TWA</b>	

## 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

### Status indicators

**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)

### Temperature range

95 % (non-condensing)

### Relative humidity (max.)

2

### Pollution degree

### MTBF (mean time between failures)

12.23 years @ MIL-HDBK-217F


### Minimum length of the monitored line

>= 2 m

## Variation

Article	Description	Type
21700151	ETHERLINE GUARD M02TWA	WLAN

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### Power requirements

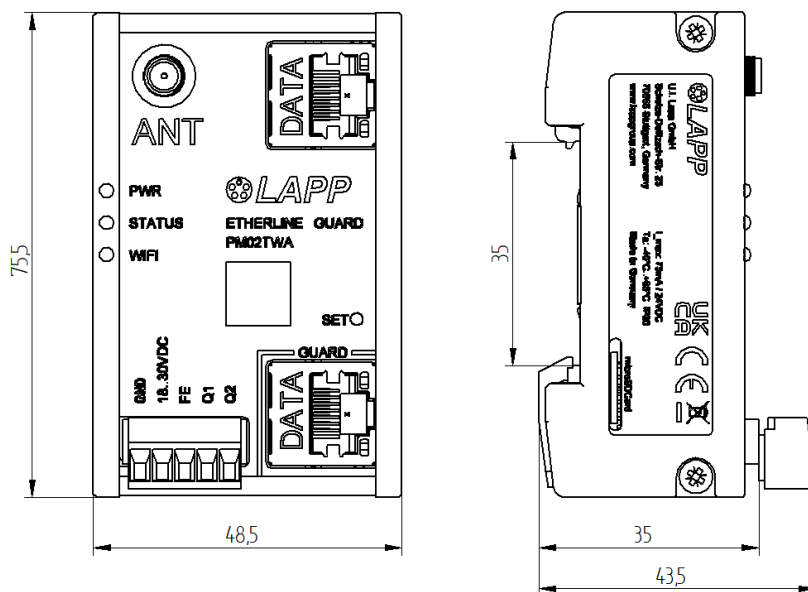
Connection	5-pole terminal block: GND, VCC, FE, Q1, Q2
Reverse Polarity protection	present
Input voltage	24 V DC (18-30V DC, SELV and limited energy circuit)
Power Consumption (max.)	2.16 W
Input current (max.) @ +24 V DC	90 mA (without load on Q1, Q2)
Outputs (Q1 / Q2)	Q1: Push-Pull (NO) / Q2: Push-Pull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

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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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