



TPMEC with 1, 2, and 3 toggle switches

In-wall interface: TDS12401BK, TDS12402BK, TDS12403BK

Front plate: TDS12421xx, 12422xx, 12423xx

TPMEC is a mechanical switch panel with **1, 2 or 3 toggle switches** for connection to AUTOBUS. The interface also has double LED feedback (two fine vertical bars) per toggle switch and an adjustable night light. Moreover, TPMEC is also unique because of its **three invisibly built-in sensors**. They permanently measure room temperature, room humidity and air quality (VOC). You can use the measured values not only for visualisation, but also for HVAC control (heating/cooling/ventilation). The **separately supplied front plates** are made of **solid aluminium** and black or white spray painted. The different **patinated solid brass** versions and the **solid stainless steel** are also made to be used in exclusive projects. There are nine finishes, each available in 1, 2 and 3-button versions.

APPLICATION

The TPMEC interface is an AUTOBUS-compatible mechanical switch panel with 1, 2 or 3 up/down toggle switches. These can be used to control almost all home automation functions (which do not require a display).

FEATURES

General

A TPMEC interface always consists of two parts: a wall part (TDS1240xBK) with 1, 2 or 3 black serrated toggles and a solid metal front plate (TDS12421xx, 22xx or 23xx).

The TDS12401BK, the TDS12402BK and the TDS12403BK interfaces are the in-wall parts, having 1, 2 and 3 toggle switches. "BK" stands for Black Knurled and is the same for all three interface versions.

The spring-loaded lever (toggle) rests in the middle position. The connected action (switching, dimming...) is performed when switching up or down manually. Short switching is usually sufficient, but with controls such as dimming and volume control, the user can push for as long as necessary to achieve his/her goal.

Each toggle switch can be configured separately in PROSOFT with an independent up/down or two non-independent up/down functions.

Thus, a triple TPMEC panel can control up to six functions. For example, six separate relays or mood settings. For dimmers and motor controls, the up/down control offers a very intuitive user experience, offering up to 3 such functions on the 3-way version.

Each TPMEC interface also has three highly sensitive built-in sensors. They measure the room temperature, humidity and VOC (air quality). These parameters are ideal for controlling the possibly integrated HVAC systems (heating/cooling/ventilation). In the OFF status, the feedback LEDs can also be configured as adjustable night lighting.

TPMEC also has a built-in buzzer for all kinds of acoustical notifications (e.g. doorbell, x number of beeps for a message or technical alarm...).

The front plates

Order the front plates separately. There are versions made of solid aluminium that are black or white spray-painted. There are also different massive bronze-patinated versions and a solid stainless-steel version. Each type is available with 1, 2, or 3 toggle switches. This results in 27 different front-plate references.

TDS12421xx = front for the 1-button version

TDS12422xx = front for the 2-button version

TDS12423xx = front for the 3-button version

"xx" stands for the material and color/patination:

- AB = Aluminium Black
- AW = Aluminium White
- BG = Bronze Gold
- BS = Bronze Standard
- BO = Bronze Old
- BM = Bronze Smoking Gun Dark Blue
- BW = Bronze Weathered
- BN = Bronze Nickel
- SS = Stainless Steel

An order example:

1. A wall part with two toggle switches: TDS12402BK
2. The matching front plate in "Bronze Old": TDS12422BO

Spacer frame

A small default gap (0.7 mm) between the wall and the back of the front plate is required for the built-in sensors to operate. For uneven walls or embossed panels or raw natural stone, the extra spacer frame (supplied with the wall part) can be placed between the wall and the interface. The front plate then sits 3.2 mm off the wall and provides a better-adapted finish.

Feedback LEDs

There are two vertical LED stripes above each toggle switch. One for the UP and one for the DOWN function. The top LED is ON when the 'up' function is ON and the lower one is similar to the 'down' function. Both LEDs can be individually off or on. In a combined function such as dimming upwards and dimming downwards, it is the top LED that indicates the status of the controlled function. In such cases, the lowest LED is never on. The intensity of the LEDs can be set to minimum/medium/maximum per TPMEC interface. In addition, you can set the night light function to three intensities and even switch it off for bedroom applications where no light is desired.

SETTINGS

Configuration

With PROSOFT Suite 5.0.271.0 or higher.

REMARK: TPMEC can also be used in G2 installations with a NANOS or PICOS central unit. In this case, it can be configured as a TDS12027. The up and down functions must be configured separately.

BUS-address

With rotary switches "Tens" + "Units", adjustable at the back of the interface.

Jumper

AUTOBUS termination resistor (supplied with the central unit). Only needs to be installed if this interface is located on the physical end of the AUTOBUS cable.

INSTALLATION

In a standard rectangular or round wall box (see drawings below). The wall box **must be airtight** (due to the sensors) and **equipped with two screws** to mount the TPMEC wall part.

POWER SUPPLY

Via the AUTOBUS connection (minimum 9V). You can check the voltage in the PROSOFT diagnostics menu.

CONNECTIONS

AUTOBUS connector set with spring contacts.

POWER CONSUMPTION

Minimum (standby; all LEDs off): 12 mA
Maximum 1-key version: 15 mA
Maximum 2-key version: 18 mA
Maximum 3-key version: 22 mA

DIMENSIONS NET | GROSS (PACKAGE)

Net:

Wall part excl. toggle: 78 H x 71 W x 31.5 D (mm)
Incl. toggle: 51.5 D
Depth in the wall box: 26 mm (+ AUTOBUS connection)
Front panel (not included with the wall part): 80L x 80W x 8H (mm).
Without spacer, the total panel thickness on the wall is 8.7 mm.
With mounted spacer, the total panel thickness on the wall is 11.2 mm.

Gross (packing):

Wall part: 178 x 105 x 85 H (mm)
Front plate: 106 x 106 x 18 H (mm)

WEIGHT NET | GROSS (PACKAGE)

Note: the front plate is not included with the wall part.

Net:

Wall part (excl. front plate) net: 60/73/86 gr (1/2/3 keys)
Front plate aluminium (black/white): 62/60/58 gr (1/2/3 keys)
Front plates 'bronze' patinated brass: 188/184/180 gr (1/2/3 keys)
Stainless steel front plate: 178/174/170 gr (1/2/3 keys)

Gross (packed):

Wall section (excl. front plate) gross: 110/125/140 gr (1/2/3 keys)
Front plate aluminium (black/white): 82/80/78 gr (1/2/3 keys)
Front plates 'bronze' patinated brass: 208/204/200 gr (1/2/3 keys)
Stainless steel front plate: 198/194/190gr (1/2/3 keys)

PACKAGE CONTENTS (WALL PART)

1 x TDS1240xBK interface (wall part)
1 x AUTOBUS connector set with spring contacts
1 x spacer frame for non-flat walls.

Note: The front plate is not included and can therefore be ordered separately. 3x9 = 27 different fronts are available. See the tables below.

ORDER REFERENCES

The AUTOBUS **wall part** (always with black knurled toggle):

wall part	1 toggle	2 toggles	3 toggles
	TDS12401BK	TDS12402BK	TDS12403BK

Solid **aluminium** front plates:

Alu front	1 toggle	2 toggles	3 toggles
Black RAL9011	TDS12421AB	TDS12422AB	TDS12423AB
White RAL9010	TDS12421AW	TDS12422AW	TDS12423AW

Solid **brass** front plates with patination:

Brass front	1 toggle	2 toggles	3 toggles
Bronze Gold	TDS12421BG	TDS12422BG	TDS12423BG
Bronze Standard	TDS12421BS	TDS12422BS	TDS12423BS
Bronze Old	TDS12421BO	TDS12422BO	TDS12423BO
Bronze Smoking Gun Dark Blue	TDS12421BM	TDS12422BM	TDS12423BM
Bronze Weathered	TDS12421BW	TDS12422BW	TDS12423BW
Bronze Nickel	TDS12421BN	TDS12422BN	TDS12423BN

Fronts in solid **stainless steel** (lightly brushed SS316L):

Stainless steel front	1 toggle	2 toggles	3 toggles
	TDS12421SS	TDS12422SS	TDS12423SS

ENVIRONMENTAL CONDITIONS

Storage (without condensation or ice formation)

Temperature: -20°C to +65°C
Relative humidity: 5% to 85%

Usage (without condensation or icing)

Temperature: 0°C to +50°C max.
Relative humidity: 5% to 80%

IP DEGREE OF PROTECTION

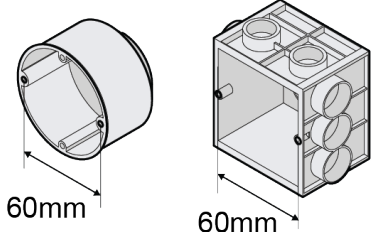
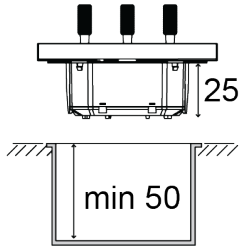
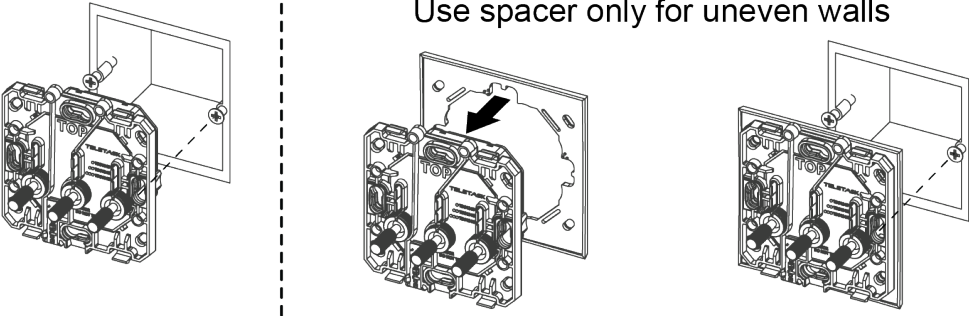
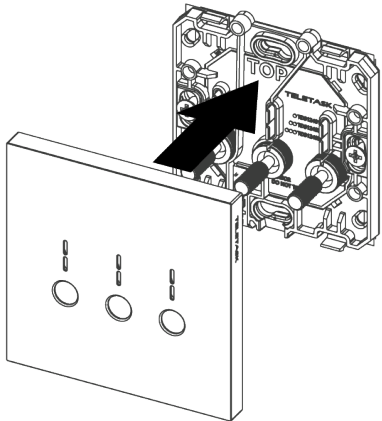
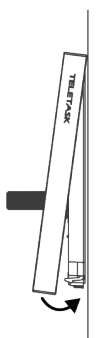
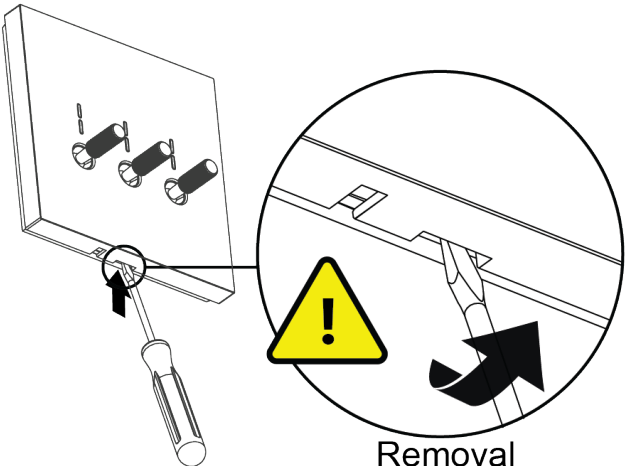
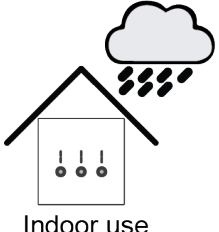
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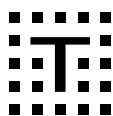
LIMITED WARRANTY

4 years

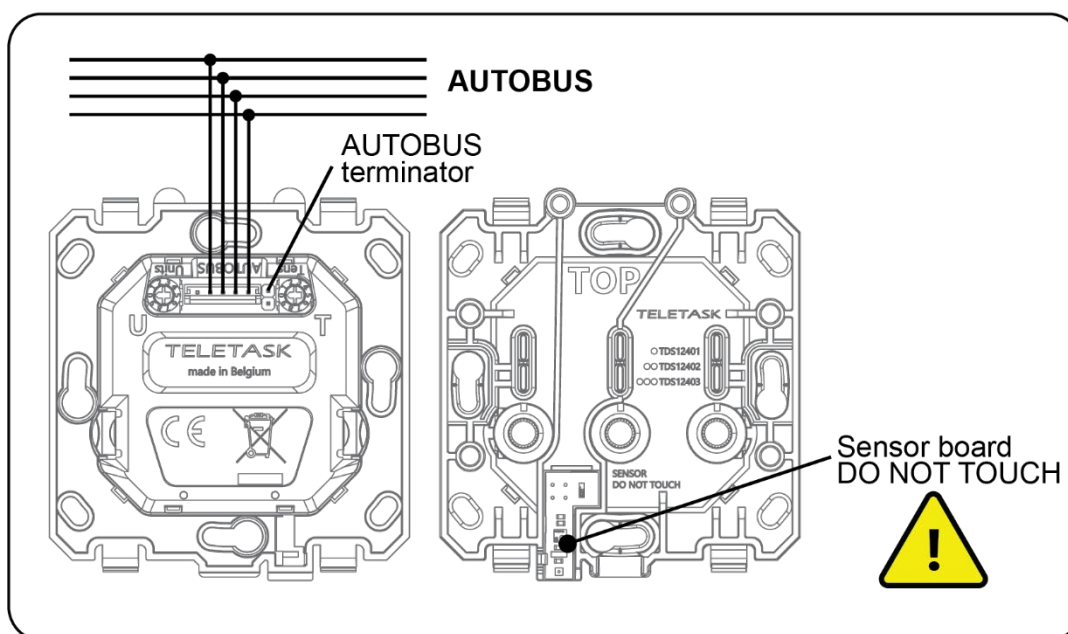


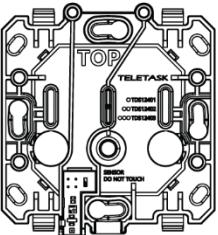
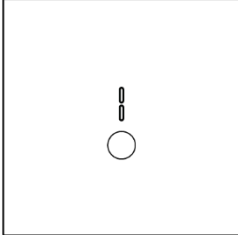
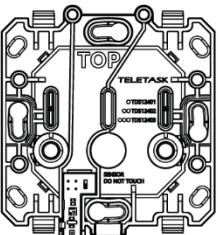
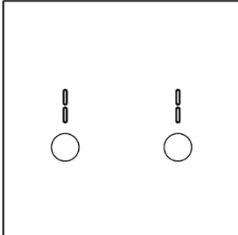
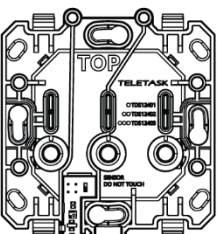
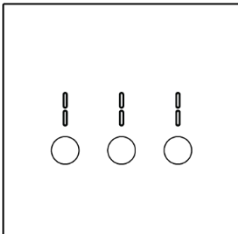
ASSEMBLY INSTRUCTIONS

	
1 Use spacer only for uneven walls 	
2 	3 
 Removal	 Indoor use



CONNECTION DIAGRAM



Wall interface	Front plate	Finish
 TDS12401BK	 TDS12421XX	 TDS1242x BG bronze gold
 TDS12402BK	 TDS12422XX	 TDS1242x BS bronze standard
 TDS12403BK	 TDS12423XX	 TDS1242x BO bronze old
		 TDS1242x BM bronze smoking gun
		 TDS1242x BW bronze weathered
		 TDS1242x BN bronze nickel
		 TDS1242x SS stainless steel
		 TDS1242x AW aluminium white
		 TDS1242x AB aluminium black