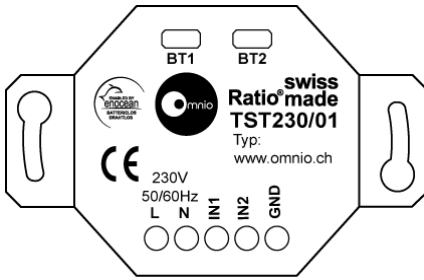


**Data sheet**  
**RATIO®-radio bus system**  
**Push-button interface 4 channel TST230/01**



The Ratio® push button interface 4 channel TST230/01 is a binary input device with an integrated 1-level-repeater. It has two inputs for two potential-free switches or pushbutton's which can be operated in 3 different operation modes. When pressed, the push-button interface sends a radio telegram (PTM200-Telegramm) which is analyzed by the Ratio® actuators / receivers.

In addition, it has an integrated repeater function. The push-button interface therefore also functions as repeater in the 1-level mode. The correctly received radio telegrams are amplified and re-sent.

Technical data	Push-button interface TST230/01	Remarks
Operating data	Voltage 230V 50/60Hz	
Radio technology	Protocol EnOcean-PTM Transmission power max. 10mW EIRP	Frequency 868,3MHz Modulation ASK
Channels	2 with two positions each	
Radio module	TCM120	
Range	Interior 30 to 100m, exterior up to 300m	
Functions	Two potential-free switches or pushbuttons Receive and amplified resending of valid radio telegrams.	
Operating data	Rated voltage 230V 50/60Hz, Idle current consumption approx. 20mA, Power Input approx. 4VA	Rated current 0,5A Power input approx. 25mA Power loss approx. 0,9W
Security	By means of external protective switch 13A Type C	
Operating and indicator modules	1 button „BT1“, 1 button „BT2“, 1 button LED „BT1“, 1 button LED „BT2“	
Connection	Screw clamp 4mm2	You can easily clamp two 1,5mm2 wires
Mechanical data	Casing: synthetic Lexan Weight: 80g	Measurements Ø=51mm Height=25mm
Mounting / Assembly	Flush or surface mounting	e.g. behind a socket or in a synthetic casing
Environmental conditions	Environmental temperature in operation -20°C ... +40°C Storage temperature -40°C ... +85°C Relative humidity (non-condensing) 5 ... 90%	
Protection category	IP20 according to EN 60529	
Norm conforming assembly	Device conforms to EN 090-2-2 and EN 60669-2-1	
Approbation	R&TTE guidelines 1999/5/EC and conforming to EU regulations. ROHS conforming according to 2002/95/EC.	
Labeling	According to EMV guidelines (residential and functional buildings), low voltage guideline.	

Telegram							
Byte	Symbol	Significance	Wert	Byte	Symbol	Significance	Wert
0	SYNC1	Synchronization	A5h	1	SYNC2	Synchronization	5Ah
2	HEADER	Length	0Bh	3	ORG	Type of transmitter	05h
4	DATA3	Key pair A Key Off Key pair A Key On Key pair B Key Off Key pair B Key On	30h 10h 70h 50h	5	DATA2	Always 0	00h
6	DATA1	Always 0	00h	7	DATA0	Always 0	00h
8	ID3	ID number part 1	xxh	9	ID2	ID number part 2	xxh
10	ID1	ID number part 3	xxh	11	ID0	ID number part 4	xxh
12	STATUS	Status byte	xxh	13	CHK	Check sum	Xxh

Diagram of connections	Designation	Type	Article number
	Push button interface 2 channel with repeater, Voltage 230VAC	TST230/01	1501000