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Model Number

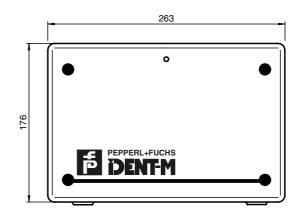
MTT-S1

Read/write device

Features

- Serial interfaces RS 232 and RS 485
- Dual-LED for function display
- Internal database
- Stand-alone functionality
- Inputs and outputs
- Motion recognition possible
- Multi-tag capability
- 100 frequency channels
- Internal control unit with push button switches, 7-segment displays and buzzer

Dimensions



Electrical connection

Interface Description: DTMF, LED, external control input

LED 1 J1: 1 LED 2 2 3 4 Gndl FD SDTMF RtnDTMF 5 6 7 Tamp a Tamp b

DTMFclosed

> Standard IC

> Standard

IC

tandard

tandard

IC

RS 232 for data station

Parallel output and relays

RS 232 / RS 485 for host processor

Tx 232a Rx 232a Gnd 232a

J3: 1 2 Tx 232b Rx 232b 3 4 Gnd 232b CGnd

Tx-/Rx-485 Tx+/Rx+485 Gnd 485t

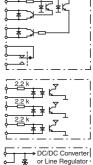
Rx 485-Rx485+ 10 Gnd 485r



J4: 1 3 Out 1e Out 2c 5 6 7 Out 2e R1c R1b R1m

J5: 1 2 In 1c In 2a 4 5 In 2c 6 In 3c

J6: 1 Spl 1 Spl 2 2 Rtnspl 1 Rtnspl 2



Technical data

Parallel input

DC supply

General specifications

Pepperl+Fuchs Group • Tel.: Germany +49 621 776-0 • USA +1 330 4253555 • Singapore +65 67799091 • Internet http://www.pepperl-fuchs.com

Operating frequency 2.435 ... 2.465 GHz , 100 ID-channels channel separation 300 kHz Polarization

read: 4 kBit/s , 16 kBit/s Transfer rate write: 4 kBit/s

Acquisition range of the motion recogni-5 m for velocities between 0.3 and 9.2 m/s

Operating distance maximum: 4 m

Memory

Type/Size	flash EEPROM 3 x 128 kByte SRAM 128 kByte
Indicators/operating means	
LED green/yellow/red	controllable per software
Electrical specifications	
Rated operational voltage U _e	20 28 V DC selectable via Jumper 10 14 V DC
Current consumption	at 24 V: 150 mA at 12 V: 500 mA
Interface 1	
Physical	RS 232
Protocol	ASCII
Transfer rate	\geq 1.2; \leq 19.2 kBit/s standard setting: 9.6 kBit/s
Interface 2	
Physical	RS 232 or RS 485; for RS 485: full- (4-wire) or half-duplex (2-wire)
Protocol	ASCII
Transfer rate	\geq 1.2; \leq 38.4 kBit/s default setting: 9.6 kBit/s
Input	
Optocoupler	3 inputs
Input level	ON: ≥ 2.4 V , max. 30 V OFF: ≥ 0 V , max. 0.2 V
Output	
Electronic	output 1: open-collector; 1 30 V DC, max. 500 mA output 2: open-collector; 1 30 V DC, max. 100 mA
Relay	switching current ≤ 2 A; P _{max} = 50 W switching voltage ≤ 220 V DC; 48 V AC
Ambient conditions	
Ambient temperature	-20 60 °C (253 333 K)
Storage temperature	-20 60 °C (253 333 K)
Mechanical specifications	
Protection degree	IP43 according to EN 60529
Material	front: polycarbonate back face: high grade steel
Mass	1.9 kg
Dimensions	263 mm x 176 mm x 54 mm (W x H x D)
Compliance with standards and directives	
Directive conformity	
R&TTE Directive 1995/5/EC	EN 60950, IEC 60215, ETS 300683, ETS 300440

Function

The read/write device establishes the connection between the code and/or data carriers of the Ident-M System T and a higher-order computer (industrial-PC, PLC, etc.). Communication with the computer occurs via an RS 232 or RS 485 (2- or 4-wire) serial interface.

The system is multi-tag capable, i.e. multiple code or data carriers are identified in the acquisition range. The write/read devices can be set to 100 different frequency channels, thereby preventing mutual interference.

The devices can also be used in stand-alone operation through various inputs and outputs.

An LED as well as a buzzer integrated in the device indicate the operating status.

The device can be adjusted and tested via an internal control panel with two push button switches and two 7-segment displays. The device is delivered ex works with the 'Confitalk' protocol software. Defined in this protocol are a wide range of commands which allow the user to perform simple communication operations between the higher-order computer and the read/write device.

Additional information can be found in the descriptions of the system and device.

Software

Communication with the identification system is very easy with the demo program IDENT 2005. It shows the system options and simplifies commissioning.

The demo program is included in the scope of delivery.

Notes

MTT Internal View

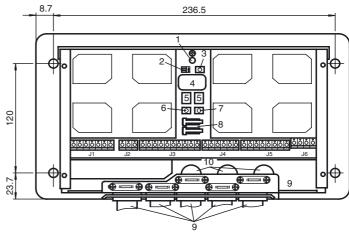
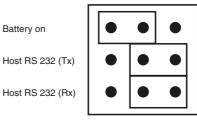


Illustration of MTT-S1 Hardware Features:

- 1 Multicoloured LED
- 2 Jumper field
- 3 RESET-button
- 4 Buzzer
- 5 Display

- 6 "Parameter-selection" button
- 7 "Value-selection" button
- 8 Monitor contact for the cover
- 9 Cable connection access, bottom
- 10 Cable connection access, back

Jumper settings



Battery off

Host RS 485 (Tx)

Host RS 485 (Rx)

Microwave field shape

HS Reading speed (16 kBit/s) LS Reading speed (4 kBit/s)

W(m) Wave width

Pr Transfer range (70 % of R_{max})
Pp Data transfer range (70 % of R_{max})

R (m) Range

