Technical Data | DOM Tapkey AccessManager

Variants:

- DOM Tapkey AccessManager Compact:
  Control unit and reader functionality in one housing.
- DOM Tapkey AccessManager V2 HiSec:
  Control unit and reader functionality in one housing plus additional reader unit in separate housing.

Technology:

- Mifare 13.56 MHz
- 2.4 GHz (BLE: Bluetooth Low Energy)

Power supply:

- External: 12-24 V DC ± 10% (terminals 7/8)
- Power output (terminals 9/10)

Voltage supply must be protected against short circuit!

Current consumption:

- Max. 250 mA (only for reader/control unit)

Time/Date :

- Buffering: 36 hours at +20°C
- Clock drift at +25°C: ± 10 minutes/year
- Clock drift at -20 and +65°C: - 50 minutes/year

Full buffering is available after 150 minutes operating time

Data preservation after power failure:

- Authorizations and events: at least 10 years

Interfaces [1]:

RS485 interface for connecting external reader:

- Addressing: via Software
- Function: half duplex
- Data rate: default 115200 Baud
- Terminal 18: A (receive)
- Terminal 19: B (transmit)
- Terminal 20: GND

Termination RS485: via DIP switch 2

- Encryption: XSALSA20-256 Bit
- Key exchange: Curve25519-256 Bit (elliptical curve)
- Signature: Poly1305-128 Bit

Connecting cable:

- Recommended cable type: JY(St)Y 2 × 2 × 0.6
  maximum cable length: 500 m (RS 485)

Shield must be connected to ground

Dip switch:

DIP switch	Position	Explanation
1	0	RS485 deactivated
	1	RS485 activated
2	0	RS485 termination off
	1	RS485 termination on
3	0	Internal bootloader after reset deactivated
	1	Internal bootloader after reset activated
4	0	Status LEDs off
	1	Status LEDs on

[1] Attention!! Consider position of dip switches!

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Environmental:	• Temperature: -25°C up to +65°C • Humidity: 20-95% no condensation • Protection class: IP54 when completely installed (tested according to DIN EN 60529)
Signalling:	• Optical signalling by 4 multicolour LED's (moving light effect) • Additional acoustic signalling
Programming:	Programmierung über NFC/BLE fähiges Smartphones mit folgenden Voraussetzungen: • Android APP ab Android 5.0 (NFC/BLE) • iOS APP ab iOS 9 / iPhone 5 (BLE) • Programmieren von Transpondern ausschließlich per Android APP mit NFC • Google ID oder Tapkey ID erforderlich
Events:	• Ring buffer for the latest 1,000 events
Duration Output:	• 8 Seconds
Inductive transponder-interface:	• Reading range: up to 10 cm • Frequency: 13.56 MHz • Field strength in 10m distance: < 42 dBµA/m • In conformity to ETSI EN 300 330 • Supports passive transponders according to ISO 14443 A and NFC according to ISO/IEC18092 • Encryption: Mifare DESFire EV1 / EV2: AES-128 Bit
Bluetooth Low Energy (BLE)	• Communication range up to 10 m • Frequency: 2.4 GHz • Transmission power: < 10 mW ERP • Conformity to ETSI EN 300 328
Encryption / Security on the interfaces (NFC/BLE and backend):	TLCP: AccessManager ←→ APP ←→ Tapkey Trust Service: • AES-128, CMAC (NIST 800-38B), RNG (ANSI X9.31) Communication to backend: • HTTPS, RSA with 4.096bit, SHA 256, TLS 1.0 or higher
Transponder types:	• DOM Tapkey Standard Tag
Storage of access authorizations:	*Access authorization on Transponder:* • up to 12 devices *Access authorization on Android / iOS smartphone:* • No limit of devices • No limit of users (Google or Tapkey IDs) • > 5 users fee-based (see licence model)

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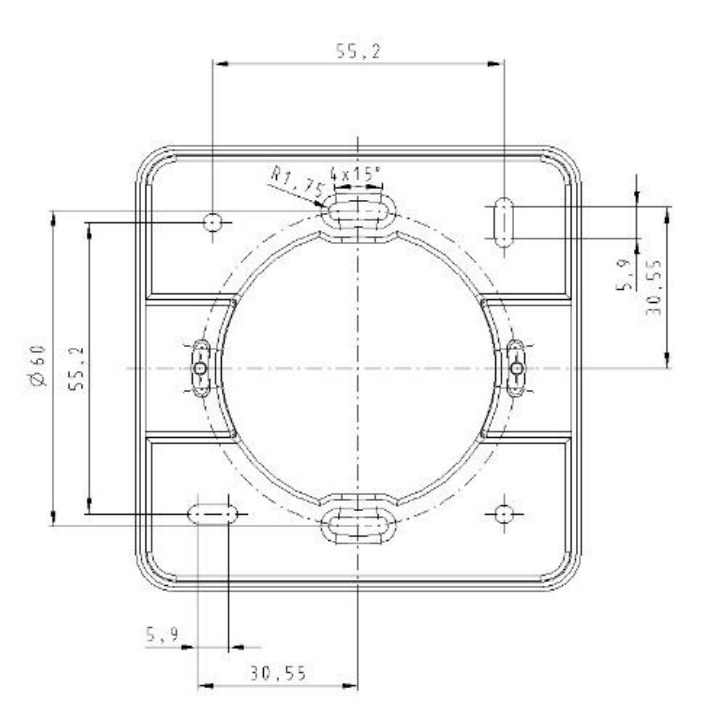
Outputs control unit:	One potential-free changeover contact[2]: • Electric strength: 30V DC 125V AC • Current load: 1 A/DC 0.3 A/AC
	Connected to screw-clamp: • Terminal 17: normally open contact (NO) • Terminal 16: common contact (C) • Terminal 15: normally close contact (NC)
Assembly:	• In-wall mounting with flush boxes ∅ 60 × 42 mm (DIN VDE 0606, DIN VDE 0471, DIN IEC 695) • Alternatively with surface mounted frame
	• Metallic objects close to the reader or other disturbing effects may reduce the range of the RFID interface and of the RF interface. • Minimum distance between two devices > 50cm.
Weight:	• Approx. 160 g including surface mounting frame
Size:	• Housing cover: 85 × 85 × 5.5 mm • Mounting frame: 85 x 85 x 10.8 mm • Cover + frame + terminals: 85 x 85 x 26 mm • Frame and surface-mounted frame: 85 x 85 x 32 mm
Plastics:	• Mounting frame and surface-mounted frame: PA6 GF30 • cover: PET / PC
Colour:	Visible components alternatively: • cover: signal white (9003), graphit grey (7024), jet black (9005) • mounting frame and surface-mounted frame: traffic grey (7042)

[2] When controlling actuators, which are an inductive load (coil), for example door opener, magnet etc. a freewheeling diode must be used. The freewheeling diode must be connected in anti-parallel.

Bolding points surface mounting frame:



These data correspond to the actual development status and are subject to change at any time without notice. All specifications valid at assembly according to installation instructions.