

Technical Data | DOM Tapkey AccessManager

Variants:	• DOM Tapkey AccessManager Compact: Control unit and reader functionality in one housing.
	• DOM Tapkey AccessManager HiSec: Control unit and reader functionality in one housing plus additional reader unit in separate housing.
	• DOM Tapkey AccessManager Updater Compact: Control unit and reader functionality in one housing.
	• DOM Tapkey AccessManager Updater 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) • PoE (terminals 5/6) *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
	Ethernet interface for direct online connectivity (just AccessManager Updater): • Terminal 1: RD- • Terminal 2: RD+ • Terminal 3: TD- • Terminal 4: TD+ • Terminal 8: GND *Shield must not be connected to the device!*
	• Encryption: XSALSA20-256 Bit • Key exchange: Curve25519-256 Bit (elliptical curve) • Signature: Poly1305-128 Bit
Communication protocols:	• LLDP, ARP, TLS, TCP/IP, UDP/IP, DHCP (deactivated in the factory settings, it is activated in the Tapkey software when it is added.)

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



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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

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:

Programming via NFC/BLE capable smartphones or LAN connection at AccessManager Updater with the following requirements:

- Android APP ab Android 5.0 (NFC/BLE)
- iOS APP from iOS 9 / iPhone 5 (BLE)
- Tapkey Web
- Programming of Transponders just via Android APP with NFC or with AccessManager Updater
- Google ID or Tapkey ID required

Events:

- Ring buffer for the latest 1,000 events

Default IP parameters:

- IP- Address: 192.168.47.11
- Subnet mask: 255.255.0.0
- Standard Gateway: 0.0.0.0

Duration Output:

- 8 seconds default (configurable from 1 – 60 sec via Tapkey App oder Tapkey Web)

Inductive transponder-interface:

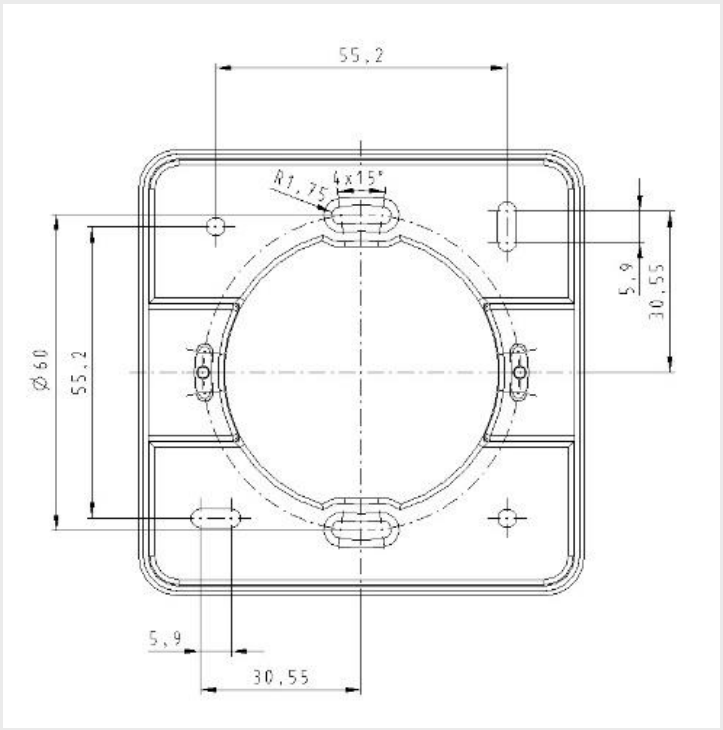
- Reading range: up to 10 cm
- Frequency: 13.56 MHz
- Field strength in 10m distance: < 42 dBµA/m
- In conformity to ETSI EN 300 330
- Supports passive transponders according to ISO 14443 A and NFC according to ISO/IEC18092
- Encryption: Mifare DESFire EV1/EV2/EV3: AES-128 Bit



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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, Clip Tag, Mini Clip Tag, Premium Plus Tag, ISO Card
Storage of access authorizations:	*Access authorization on Transponder:* • Up to 12 devices or 12 device groups *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)
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.