Technical Data | ENiQ® AccessManager V2

Variants:	• AccessManager V2 Compact: Control unit and reader functionality in one housing.
	• AccessManager V2 HiSec: Control unit and reader functionality in one housing plus additional reader unit in separate housing.
	• AccessManager V2 with up to 3 separate reader units.
	• AccessManager V2 Terminal: Control unit and reader functionality in one housing with validity extension.
	• AccessManager V2 Terminal HiSec: Control unit and reader functionality in one housing plus additional reader with validity extension.
	• AccessManager V2 ITT: Control unit and reader functionality in one housing with validity extension and variable authorization assignment.
	• AccessManager V2 ITT HiSec: Control unit and reader functionality in one housing plus additional reader with validity extension and variable authorization assignment.
	• AccessManager V2 Compact: Control unit and reader functionality in one housing for connection to the DOM Liftcontrol
	• AccessManager V2 HiSec: Control unit and reader functionality in one housing plus additional reader unit in separate housing for connection to the DOM Liftcontrol
Technology:	• Mifare 13.56 MHz • 2.4 GHz (BLE: Bluetooth Low Energy)
Power supply:	Depending on connection: • External: 12-24 V DC ± 10% (terminals 7/8) • Power output (terminals 9/10)[1] • 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

[1] Attention!! For DOM reader units only. When using PoE max. one reader unit!

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Interfaces [2]**:**

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

In the case of ACM Liftcontrol, the control unit is connected via this interface. In addition, a maximum of 1 passive reader can be connected.

Ethernet interface for direct online connectivity:

- 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, UDP/IP, DHCP

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 with the following prerequisites:

- ENiQ App (NFC/BLE) (see datasheet ENiQ App)

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

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- ENiQ Software via BLE Stick (see separate datasheet of ENiQ AccessManagement Software)
- Storage of max. 5 programming cards

Events:

- Ring buffer for the latest 2000 events

Default IP parameters:

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

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

- Encryption: Mifare DESFire EV1 / EV2 /EV3: AES-128 Bit
  Mifare Classic: Crypto 1
- Additionally AES-128 bit encryption with object specific keys

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

Inputs control unit:

Two inputs for floating switches:

- Max. cable impedance: < 10 Ω
- Max. cable length: < 20 m

Connected to screw-clamp:

- Terminals 11/12: input 1
- Terminals 13/14: input 2

Except for PoE supply, the inputs are galvanically connected to the interfaces and to the power supply!

- Recommended cable type: JY(St)Y 2 × 2 × 0.6
  Attention: The cable shield must be connected to ground.

Outputs control unit:

One potential-free changeover contact[3]:

- 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)

[3] 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.

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Logical linking of inputs and outputs:

- Control for temporal and logical linking; different configurations possible

Does not apply to AccessManager Terminal and AccessManager ITT and AccessManager Liftcontrol!

Storage of access authorisations in the device:

- Supported transponders:
  - Mifare DESFire EV1 / EV2 / EV3 2k, 4k, 8k
  - Mifare Classic 1k, 4k
  - Mifare Plus S/X 2k, 4k
  - Mifare Ultralight / Ultralight C
- Storage of maximal 5.000 authorisations in the device
- Identification of the transponders by their UID or by other unique data

Storage of access authorisations on the transponders:

- Supported transponder types:
  - Mifare DESFire EV1 / EV2 / EV3 2k, 4k, 8k
  - Mifare Classic 1k
- Other data on the transponder:
  - „Blacklist“ with blocked transponders
  - Authorisation period, weekly schedule at the device

Weekly and day’s schedules:

- Storage of max. 256 weekly / day’s schedules per device
- Each weekly schedule points to 10 arbitrary day’s schedules (7 week days and 3 special days for holidays):

1	2	3	4	5	6	7	8	9	10
Mon	Tue	Wed	Thu	Fri	Sat	Sun	holiday / vacation		
DS1	DS2	DS3	DS4	DS5	DS6	DS7	DS8	DS1	DS2

- Each day’s schedule consists of 96 time slots of 15 minutes, in each case definable as authorised or unauthorised:

0^{00}	1^{00}	2^{00}	3^{00}	...	20^{00}	21^{00}	22^{00}	23^{00}
				...				

- Access rights of the weekly / day’s schedules:
  - # 0: No access (unauthorised)
  - # 1: Access with no time-limits, active special functions may limit access
  - ## 2-254: Freely definable
  - # 255: Access with no time-limits, active special functions are ignored
- Permanent-open and permanent-close weekly schedules
- Office function

Holidays:

- Storage of maximum 256 holidays or vacation periods per device
- Definition of 3 different kinds of holidays/vacations
- Begin / end as from / to date

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Validity extension:

only available for variants AccessManager Terminal, AccessManager Terminal HiSec, AccessManager ITT and AccessManager ITT HiSec

- Only available for intelligent transponder Mifare Classic and DESFire
- The following alternatives can be configured per software:
  1. Fixed time on the same day
  2. Until dd:hh:mm after showing transponder
  3. To fixed Date/Time

Authorization assignment:

Only available for AccessManager ITT and AccessManager ITT HiSec

- Variable authorization assignment for intelligent transponder Mifare Classic and DESFire.

Authorization assignment only by Software.
Requiring online connection.

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:

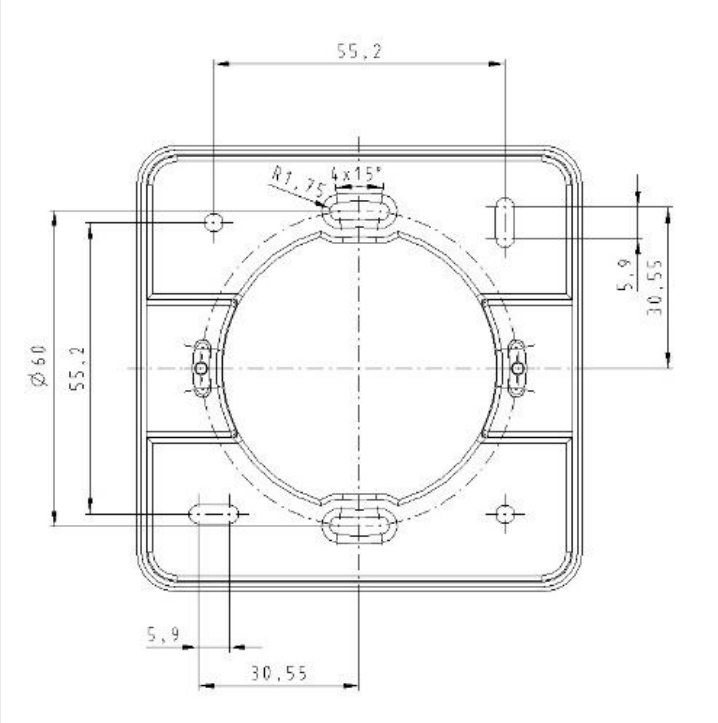
- Mounting frame and surface-mounted frame: PA6 GF30
- cover: PET / PC

Colour:

Visible components alternatively:

- cover: signal white (9003), graphit grey (7024), jet black (9005)
- mounting frame and surface-mounted frame: traffic grey (7042)

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.