



Technical Data

ENiQ® RF NetManager V2

Technology:

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

Power supply:

Depending on connection:

- External: 12-24 V DC \pm 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: \pm 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:

- Configuration and events: at least 10 years

Interfaces ²:

- Terminal 18: unused
- Terminal 19: unused
- Terminal 20: unused

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 \times 2 \times 0.6
maximum cable length: 500 m (RS 485)



Shield must be connected to ground

Dip switch:

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

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

² 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:

- Programming via BLE and online using ENiQ Software

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: typically up to circa 15 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 contact³:

- Electric strength: 30V DC 125V AC
- Current load: 1 A/DC 0.3 A/AC

Connected to screw-clamp:

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:

- Terminal 17: normally open contact (NO)
- Terminal 16: common contact (C)
- Terminal 15: normally close contact (NC)

- Control for temporal and logical linking; different configurations possible



Firmware 4.1 or higher needed!

Assembly:

- In-wall mounting with flush boxes $\varnothing 60 \times 42$ 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: $85 \times 85 \times 5.5$ mm
- Mounting frame: $85 \times 85 \times 10.8$ mm
- Cover + frame + terminals: $85 \times 85 \times 26$ mm
- Frame and surface-mounted frame: $85 \times 85 \times 32$ mm

Plastics:

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

Colour:

Visible components alternatively:

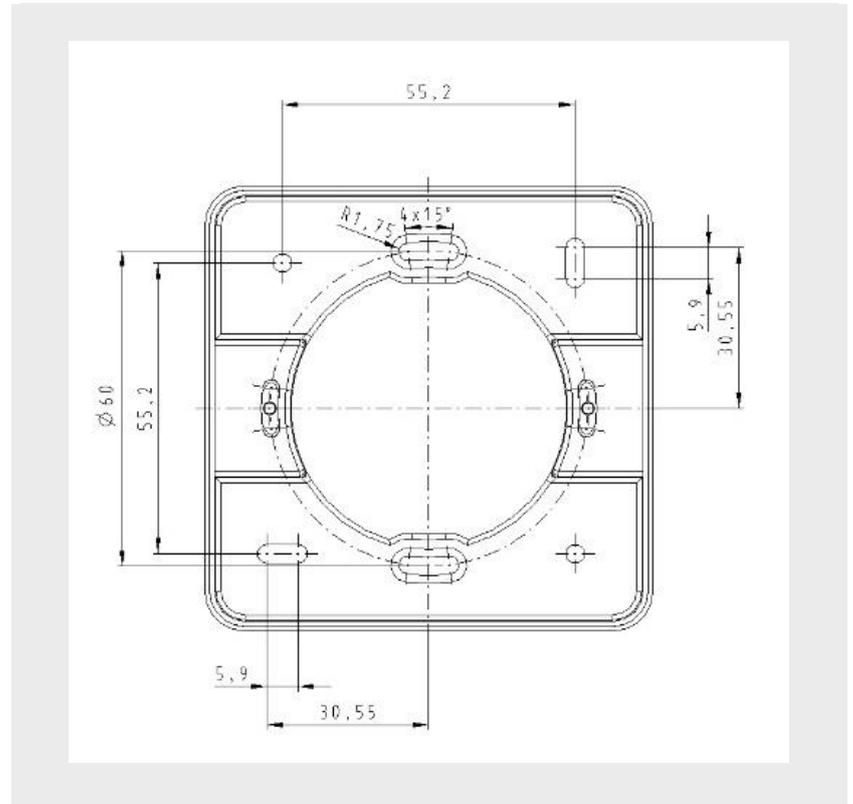
- cover: signal white (9003), graphit grey (7024), jet black (9005)
- mounting frame and surface-mounted frame: traffic grey (7042)



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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.