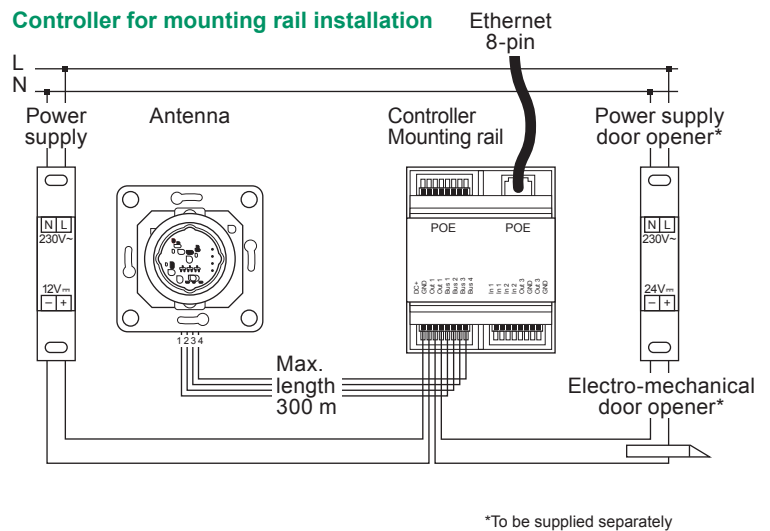


## eLOCK eXpert Wall scanner



### Technical data (Hardware)

<b>Power supply</b>	12 - 24 VDC power supply unit, min. 6 VA Power over Ethernet (PoE) in acc. IEEE802.3af-2003
<b>Power consumption</b>	depending on the number of connected antennae 1 connected antenna: 1.8 W 2 x connected antennae 2.0 W 3 x connected antennae 2.2 W 4 x connected antennae 2.4 W
<b>Data retention during power outage</b>	Date/time buffered for several years (Buffer battery) Unlimited buffering of event memory
<b>Time</b>	Accuracy under normal usage: +/- 9 minutes/year Automatic daylight saving time switching
<b>Interfaces</b>	<b>Controller</b> <ul style="list-style-type: none"> <li>– RS485 for connection of antennae</li> <li>– Ethernet interface (RJ45 alternative cable connection) for LAN Connection</li> <li>– Interface for connection of external relays</li> <li>– Power supply interface</li> </ul> <b>Antenna</b> <ul style="list-style-type: none"> <li>– RS485 interface for connection of controller</li> <li>– Inductive 13.56 MHz/NFC transponder interface</li> </ul>
<b>Application area</b>	<b>Controller mounting rail (TS)</b> Protected interior area  <b>Antenna, in combination with</b> 80 x 80 mm covering cap, low spacing frame (option) Interior / protected exterior area 80 x 80 mm covering cap, IP65spacing frame for exterior area 55 x 55 mm covering cap for interior / protected exterior area  <b>Siedle Antenna</b> Protection class in acc. DIN EN 60529 IP54 (In the inbuilt frame of a Siedle Vario or Compact door intercom system)



<b>Output / Relays</b>	<p><b>Output 1 (Out1)</b> 1 internal relay, PhotoMOS, Closer/NO, potential-free, max. 60 VAC/DC / 1.6 A – Controller for mounting rail installation</p> <p><b>Output 2 and 3 (Out2 and Out3)</b> Switching outputs (logical outputs), each with max. 6 VDC / 30 mA for the connection of up to 2 external relays, each with 1 electro-mechanical changeover contact: – External relay for mounting rail installation max. (AC): 250 V; 6 A; 1500 VA max. (DC): 30 / 110 / 220 V; 6 / 0.2 / 0.2 A</p>
<b>Installation environment</b>	<p><b>Controller for mounting rail installation (TS)</b> – Mounting rail: 35 mm – Controller width: 71.6 mm</p> <p><b>OPERTIS Antenna</b> – Build-in depth: <math>\geq 20</math> mm – Build-in diameter <math>\geq 53</math> mm or standard flush-mounting box with 60 mm mounting distance</p> <p><b>Siedle Antenna</b> – Installation environment Siedle Vario/Compact intercom systems – Mounting distance between antennae: min. 100 mm in the 3D space</p>
<b>Connection cables</b>	<p><math>\leq 300</math> m between controller and antenna (Total length of all antennae connected in series)</p>
<b>Antennae (per controller)</b>	<p><b>Power supply through power supply unit</b> – Up to 4 antennae per controller</p> <p><b>Power supply with PoE (possible combinations)</b> – Mounting rail controller: 3 Antennae or 2 Antennae and 1 external relay or 1 Antenna and 2 external relays</p>
<b>Protection class (DIN EN 60529)</b>	<p>IP65 – OPERTIS Wall scanner antenna with IP65 wall scanner spacing frame and 80 x 80 mm wall scanner covering cap</p> <p>IP54 – Siedle antenna in Siedle frame</p> <p>IP21 – OPERTIS Wall scanner antenna with 80 x 80 mm wall scanner covering cap or 55 x 55 mm wall scanner covering cap, incl. connection with low wall scanner spacing frame as required.</p> <p>IP20 – Mounting rail controller</p>
<b>Operating temperature</b>	<p>- 20 °C to + 55 °C (OPERTIS antenna, Siedle antenna, 80 x 80 mm covering cap) - 20 °C to + 50 °C (Controller) - 20 °C to + 45 °C (55 x 55 mm covering cap)</p>
<b>Storage temperature</b>	<p>- 40 °C to + 85 °C (controller, OPERTIS antenna, Siedle antenna, 80 x 80 mm covering cap) - 20 °C to + 60 °C (55 x 55 mm covering cap)</p>
<b>Relative humidity (operation/storage)</b>	<p>– max. 95 % without condensation</p>
<b>Read distance</b>	<p>up to 30 mm, depending on the construction of the transponder</p>
<b>Approvals, Norms and Directives</b>	<p>➤ CE Conformity ➤ RED Directive 2014/35/EU ➤ RoHS Directive 2002/95/EG</p>



## Options

<b>Controller</b>	<ul style="list-style-type: none"><li>For controlling internal and external relays.</li><li>Prepared for the connection of up to 4 external relays.</li><li>– Controller for mounting rail installation</li></ul>
<b>Antennae</b>	<ul style="list-style-type: none"><li>For connection to an OPERTIS eLOCK eXpert Controller.</li><li>– OPERTIS Antenna</li><li>– Antenna in Siedle housing (Vario or Compact intercom system)</li><li>Colours: Siedle colour schemes</li></ul>
<b>Covering caps</b>	<ul style="list-style-type: none"><li>For OPERTIS eLOCK eXpert Controller and antennae.</li><li>– 80 x 80 mm Covering cap, with or without light ring</li><li>Surface: Polyamide</li><li>Colours: 99 (Pure white), 90 (Deep black), 95 (Stone grey), 92 (Anthracite grey)</li><li>– 55 x 55 mm Covering cap with light ring, for combining with commonly used switch programmes from manufacturers such as Gira, Becker, Jung, Merten, and others</li><li>Surface: Polyamide; Colours: white, black</li></ul>
<b>Spacing frame</b>	<ul style="list-style-type: none"><li>for OPERTIS eLOCK eXpert antennae, covering caps.</li><li>– Low spacing frame for surface mounting of OPERTIS eLOCK wall scanner</li><li>Antenna in combination with 80 x 80 mm OPERTIS eLOCK wall scanner covering cap</li><li>Anodised aluminium, silver colour</li><li>– IP65 spacing frame for surface mounting of OPERTIS antenna in exterior area</li><li>in combination with 80 x 80 mm OPERTIS eLOCK wall scanner covering cap</li><li>Anodised aluminium, silver colour</li></ul>
<b>External relay</b>	<ul style="list-style-type: none"><li>External relay to be controlled by OPERTIS eLOCK wall scanner</li><li>– External relay for mounting rail installation Assembly unit with 1 relay (changeover contact)</li><li>max. (AC): 6 A; 250 V; 1500 VA</li><li>max. (DC): 6 / 0.2 / 0.12 A; 30 / 110 / 220 V</li></ul>
<b>Power supply unit</b>	<ul style="list-style-type: none"><li>Power supply unit for powering OPERTIS eLOCK wall scanners</li><li>– Power supply unit for mounting rail installation</li><li>Output voltage 12 VDC; output current 1.0 A; output performance max. 12 W</li></ul>
<b>Online License Card</b>	<ul style="list-style-type: none"><li>Transponder for transferring an OPERTIS eLOCK eXpert Online licence to the eLOCK eXpert software, for expanding the OPERTIS eLOCK eXpert software with a Smart Office licence and an online licence.</li><li>The online licence opens up the OPERTIS eLOCK eXpert software for using the online functions for a wall scanner.</li></ul>



## Technical data (System)

**System administration** ————— OPERTIS eLOCK eXpert

**Optical signalling** ————— through LEDs (red, green, blue, yellow); **acoustic** through a buzzer (Can be activated/deactivated for each wall scanner through the OPERTIS eLOCK software)

**Event memory in the device** ————— Ring buffer the last 10,000 accesses

**Coupling duration** ————— 3 - 1800 seconds, adjustable through the eLOCK eXpert software

**Transponder technology** ————— MIFARE® DESFire®

**Memory requirements** ————— ➤ 2K – S – small locking system – max. 154 locking rights  
**per transponder** ➤ 4K – M – mid-sized locking system – max. 666 locking rights

**Operating options** ————— – Offline operation  
– Online operation

**System sizes** ————— **Across the system**

- 250,000 Transponders
- 65,000 End devices
- Unlimited persons
- Unlimited end device groups (as a tree structure with a depth of ≤ 20 levels)
- Unlimited locking groups
- Unlimited person time profiles
- Unlimited end device time profiles
- Unlimited public holiday dates

**Per end device**

- 250,000 Transponders
- 20 End device groups (max. depth of the tree structure)
- Unlimited locking groups
- Unlimited person time profiles
- 1 Device time profile
- 512 Public holiday dates
- Logging of the last 10,000 accesses (ring buffer)

**Per transponder**

- Locking rights (end devices, end device groups): 154 with small locking systems  
666 with mid-sized locking systems, in acc. with the defined size of the locking system
- 6 Individual time profiles
- 1 Fixed time profile “Always”
- Unlimited public holiday dates
- 5 blacklist entries (lost transponders of the entire locking system),  
for blocking on the end devices (ring buffer)
- 20 System/ battery messages (battery low) from the offline end devices (ring buffer)
- Max. 3 eLOCK eXpert locking systems (applications)

**Per end device group**

- 250,000 Transponders
- Unlimited locking groups

**Per locking group**

- Locking rights (end devices, end device groups): 154 with small locking systems  
666 with mid-sized locking systems, in acc. with the defined size of the locking system
- Unlimited persons



<b>Programming</b>	<p>All locking rights are programmed in the OPERTIS eLOCK eXpert software. All pending programming tasks are listed in the ToDo menu.</p> <p><b>Data transfer can be done selectively over:</b></p> <ul style="list-style-type: none"><li>▶ OPERTIS NFC Stick in combination with the OPERTIS eLOCK eXpert software (at end devices and transponders)</li><li>▶ OPERTIS ToDo Card (at end devices)</li><li>▶ The computer network, online (at wall scanners with online licence)</li><li>▶ Wall scanners with online licence (updating the transponder)</li></ul>
<b>Time profile</b>	<p><b>Person time profile</b> – Defines the validity period of the transponder</p> <p><b>End device time profile</b> – Defines the timepoint (open/close or only close) for the automatic activation/deactivation of Office mode.</p> <p>One time profile consists of a maximum of 10 slots. Each slot defines a timepoint (from/till) and the corresponding weekdays and special days.</p>
<b>Office mode</b>	<p>Special operating mode: Serves to be able to open a door with authorisation checking, e.g. for opening a door during the working day to allow public access</p> <p>Activation/deactivation is done through a special routine directly at the end device and is reserved for transponders for which this additional authorisation has been released.</p>
<b>Fire service mode</b>	<p>is activated exclusively when a fire service transponder is used. If the end device is in fire service mode, the door can be opened without presenting a transponder. Fire service mode is always indicated through a yellow light signal, irrespective of how signalling is defined in the software. Fire service mode is always activated through the authorisation check when a fire service transponder is presented.</p>
<b>Ticket transponder</b>	<p>the validity is limited (1 - 8,760 hours) and is activated the first time it is used. A ticket transponder can be released for 24 hours, for example, from the first usage. Each transponder belonging to a locking system can be programmed as a ticket transponder, through a special programming routine.</p>
<b>Available end devices</b>	<p><b>Wall scanner</b></p> <ul style="list-style-type: none"><li>– For doors with automatic control. The wall controller sends a triggering signal, e.g. to the automatic door, car park barrier, elevator door or electric door opener</li><li>– Interior or exterior deployment, depending on components used</li><li>– The wall scanner can use the software's online functions through an online licence. For example, transponders can be updated through a wall scanner with an online licence</li></ul> <p><b>Knob cylinder and half-cylinder</b></p> <ul style="list-style-type: none"><li>– Simple and quick installation</li><li>– Modular construction for extra flexibility, e.g. simple, retrospective extension</li><li>– Knob cylinders can be deployed on internal and external doors</li><li>– Large number of options, e.g. APS, with a defined position of the locking lug for doors in escape and rescue routes, FZG, with freewheel function for gear locks in escape door locks, Waterproof, for outdoor use or fire protection (120 minutes).</li></ul> <p><b>Lever Cylinder</b></p> <ul style="list-style-type: none"><li>– for thin-walled doors on mailboxes, control cabinets and similar closures that can be closed on one side.</li></ul> <p><b>Comfort system APS</b></p> <ul style="list-style-type: none"><li>– Convenient handling</li><li>– Attractive design, through the minimalist design of the antenna caps</li><li>– Can be discreetly integrated into any building design</li><li>– Opening is done by simply presenting an authorised transponder</li><li>– for internal and external fire protection doors and emergency exit and escape route doors</li></ul>



## Ordering information (system-dependent)

### Sets

ES324.0001T ——— TS Wall scanner set (Controller TS Offline, antenna (outdoor), cover cap 80 mm black, power supply TS)

### Controller

ES324.1000T ——— Mounting rail controller

### Antennae

ES324.2000 ——— Antenna (exterior)

ES324.2001 ——— Antenna in Siedle housing (exterior)

### Caps

ES0460 ——— 80 mm OPERTIS wall scanner covering cap

ES0460S ——— 80 mm OPERTIS blank wall scanner covering cap

ES004.3001 ——— 55 mm wall scanner covering cap

ES004.3002 ——— Wall scanner low spacing frame

ES004.3000 ——— Wall scanner IP65 spacing frame

### Accessories

ES0531T ——— External relay for mounting rail installation, single

ES004.4000T ——— Power supply unit for mounting rail installation 12 VDC 1.0 A, 12 W

### Online License

ES327.2004 ——— Online License Card