



### Main

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|---------------------------------|----------------------------------------------------------------------|
| Range of product                | Acti 9                                                               |
| Product name                    | Acti 9 Smartlink                                                     |
| Product or component type       | Smart communication module                                           |
| Device short name               | Smartlink Modbus                                                     |
| Application type                | Load control<br>Breaker status monitoring<br>Basic energy metering E |
| Number max of connected devices | Up to 11 wired devices                                               |
| Group of channels               | 1 group of 11 digital channels                                       |
| Maximum supply current          | 1.5 A                                                                |
| [Us] rated supply voltage       | 24 V DC +/- 20 %                                                     |
| Connectivity to devices         | Digital input and output<br>Pulse output meter                       |
| Communication service           | Modbus slave for RS485                                               |
| Web server                      | BMS controller compatible                                            |
| Web services                    | Web page                                                             |

### Complementary

|                           |                                                                                                                                                                               |
|---------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Application specific I/O  | Pulse totalising counter<br>Pulse converter                                                                                                                                   |
| Protection type           | Short-circuit protection for analog input<br>Against reverse polarity for auxiliary supply<br>Against reverse polarity for input<br>Overvoltage at 33 V DC for digital output |
| Immunity to microbreaks   | 10 ms                                                                                                                                                                         |
| Reset                     | Factory reset on front face                                                                                                                                                   |
| Input/Output type         | 2 inputs + 1 output per digital channel                                                                                                                                       |
| Input type                | Current sink for digital input, 24 V DC +/- 20 % at 2.5 mA                                                                                                                    |
| Maximum permanent current | 5 mA for digital input                                                                                                                                                        |

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| Electronic filtering time    | 2 ms for digital input from state 0 to state 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Output type                  | Logic current source: 24 V - DC - 100 mA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Maximum voltage drop         | <1 V at state 1 digital output                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Inrush current               | 0.5 A for digital output<br>3 A for power supply                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Local signalling             | Communication: 1 LED (yellow)<br>Status: 1 LED (green, orange and red)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Type of setting              | Modbus address 01...99 for address encoders<br>Reset for address encoders<br>Reset for plug in, plug out the auxiliary supply                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Mounting position            | Horizontal and vertical on DIN rail                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Colour                       | White (RAL 9003)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Location of connection       | Front                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Connections - terminals      | Spring-loaded terminal Ti24 qty: 11 for digital input/output, ordered separately<br>Plug-in connector qty: 1 for supply circuit<br>Plug-in connector qty: 1 for communication bus                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Clamping connection capacity | 2 x 0.25 mm <sup>2</sup> for twisted shielded pairs cable, flexible with cable end for communication bus<br>2 x 0.25 mm <sup>2</sup> for twisted shielded pairs cable, flexible without cable end for communication bus<br>2 x 0.25 mm <sup>2</sup> for twisted shielded pairs cable, rigid with cable end for communication bus<br>2 x 0.25 mm <sup>2</sup> for twisted shielded pairs cable, rigid without cable end for communication bus<br>1 x 0.5...1 x 1.5 mm <sup>2</sup> , flexible with cable end for control<br>1 x 0.5...1 x 1.5 mm <sup>2</sup> , flexible without cable end for control<br>1 x 0.5...1 x 1.5 mm <sup>2</sup> , rigid with cable end for control<br>1 x 0.5...1 x 1.5 mm <sup>2</sup> , rigid without cable end for control<br>2 x 0.2...2 x 1.5 mm <sup>2</sup> , flexible with cable end for supply circuit<br>2 x 0.2...2 x 1.5 mm <sup>2</sup> , flexible without cable end for supply circuit<br>2 x 0.2...2 x 1.5 mm <sup>2</sup> , rigid with cable end for supply circuit<br>2 x 0.2...2 x 1.5 mm <sup>2</sup> , rigid without cable end for supply circuit |
| Wire stripping length        | Control: 10 mm<br>Supply circuit: 7 mm<br>Communication bus: 7 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Communication network type   | RS485 Modbus RTU slave SUB-D 9 9.6...19.2 kbauds                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| 9 mm pitches                 | 0 useful                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Height                       | 22.5 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Width                        | 359 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Depth                        | 42 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Product weight               | 195 g                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Provided equipment           | Set of 1 bus connector<br>Set of 1 power supply connector<br>Set of 2 locking clips                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Range compatibility          | iTL auxiliary<br>Linergy FM<br>iOF+SD 24<br>iACT24<br>iATL24<br>pulse output meter<br>RCA iC60<br>Acti 9 iCT auxiliary<br>Acti 9 iC60<br>Acti 9 iID<br>Acti 9 iSW-NA<br>Acti 9 iDPN Vig<br>Acti 9 C40<br>Multi 9 C60<br>Acti 9 DT40<br>Acti 9 DT60<br>Acti 9 I-NA<br>Acti 9 ITG40<br>Acti 9 iDPN<br>Acti 9 Reflex iC60 Ti24 connector                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Commissioning interface      | ECOREACH<br>Web page                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Market segment               | Residential<br>Small commercial                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Compatibility code           | Acti 9 Smartlink                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |

## Environment

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| IP degree of protection               | IP20                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Pollution degree                      | 3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Electromagnetic compatibility         | Resistance to electrostatic discharge (air discharge), 8 kV, conforming to IEC 61000-4-2<br>Resistance to electrostatic discharge (contact discharge), 4 kV, conforming to IEC 61000-4-2<br>Resistance to radiated electromagnetic fields (80 MHz...3 GHz), 10 V/m, conforming to IEC 61000-4-3<br>Power supply: resistance to fast transient (5...100 kHz), 2 kV, conforming to IEC 61000-4-4<br>Input/output: resistance to fast transient, 1 kV, conforming to IEC 61000-4-4<br>Communication bus: resistance to fast transient, 1 kV, conforming to IEC 61000-4-4<br>Conducted EMC (0.15...80 MHz), 10 V, conforming to IEC 61000-4-6<br>Immunity to magnetic fields at network frequency, 30 A/m, conforming to IEC 61000-4-8 |
| Environmental characteristic          | Corrosive 3C2 conforming to IEC 60721-3-3<br>Salt mist 2 conforming to IEC 60068-2-52                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Vibration resistance                  | 1 gn, amplitude = 3.5 mm (f = 5...300 Hz) 10 cycles conforming to EN/IEC 60068-2-6                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Shock resistance                      | 15 gn for 11 ms conforming to IEC 60068-2-27                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Fire resistance                       | Other parts: 650 °C ( 30 s ) conforming to IEC 60695-2-10<br>On connection terminals: 960 °C ( 30 s ) conforming to IEC 60695-2-10                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Tropicalisation                       | 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Relative humidity                     | 93 % at 40 °C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Operating altitude                    | 0...2000 m                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Ambient air temperature for operation | -25...60 °C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Ambient air temperature for storage   | -40...80 °C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |

## Offer Sustainability

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| Sustainable offer status   | Green Premium product                                                                                                 |
| EU RoHS Directive          | Pro-active compliance (Product out of EU RoHS legal scope)<br><a href="#">EU RoHS Declaration</a>                     |
| Mercury free               | Yes                                                                                                                   |
| RoHS exemption information | <a href="#">Yes</a>                                                                                                   |
| China RoHS Regulation      | <a href="#">China RoHS declaration</a><br>Product out of China RoHS scope. Substance declaration for your information |
| Environmental Disclosure   | <a href="#">Product Environmental Profile</a>                                                                         |
| Circularity Profile        | <a href="#">End of Life Information</a>                                                                               |

## Contractual warranty

|          |           |
|----------|-----------|
| Warranty | 18 months |
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