



Figure similar

DIMENSIONS 96MM X 96MM X 100MM 4 INPUTS FOR AC VOLTAGE MEASUREMENTS 4 INPUTS FOR AC CURRENT MEASUREMENTS 2 BINARY OUTPUTS 2 BINARY INPUTS WEB SERVER FOR PARAMETERIZATION AND VISUALIZATION NTP SYNCHRONIZATION CE CERTIFICATION AND UL LISTING PANEL MOUNTED INSTRUMENT WITH GRAPHICAL DISPLAY ETHERNET-SWITCHING INTERNAL MEMORY 2 GB WITHOUT SERIAL COMMUNICATION INTERFACE ETHERNET INTERFACE AND COMMUNICATION PROTOCOL, RJ45 MODBUS TCP AND IEC61850 SERVER

| Measuring functions  |           |
|--|-----------|
| sampling frequency / per sampling cycle  | 10 240 Hz |
| number of harmonics  | 63        |
| product function / phase angle measurement   | Yes       |
| product function / active power measurement  | Yes       |
| product function / reactive power measurement  | Yes       |
| product function / apparent power measurement  | Yes       |
| product function / querying of limit violations  | Yes       |
| product function / logic function  | Yes       |
| product function / measurement of the harmonic active power  | Yes       |
| type of measured value detection / min./max. values  | Yes       |
| type of measured value detection / mean values   | Yes       |
| accuracy class / of the measuring instrument / for measured variable active power / acc. to IEC 62053-22 | 0,2S      |
| accuracy class / of the measuring instrument / for measured variable reactive power                      | 0,5       |
| storage capacity   | 2 Gbyte   |
| Power Quality functions  |           |
| power quality assessment function / transient detection/logging  | Yes       |
| power quality assessment function / Total Harmonic Distortion (THD)                                      | Yes       |
| power quality assessment function / voltage dip  | Yes       |
| power quality assessment function / detecting and visualization of voltage fluctuations                  | Yes       |
| power quality assessment function / measurement of the harmonic phase angle                              | Yes       |
| product function / overvoltage detection   | Yes       |
| product function / for voltage variations and flicker / integrated / according to IEC 61000-4-15         | Yes       |
| accuracy class / of the measuring instrument / acc. to IEC 61000-4-30                                    | Class A   |
| File formats   |           |
| Type of data format / for record / COMTRADE  | Yes       |
| Type of data format / for record / PQDif   | Yes       |
| type of data transmission / via CSV  | Yes       |
| Energy Management functions  |           |
| product function / active energy measurement   | Yes       |

|   |                             |
|---|-----------------------------|
| product function / reactive energy measurement            | Yes                         |
| product function / apparent energy measurement            | Yes                         |
| energy management function / calculation of load profiles | Yes                         |
| energy management function / tariffs                      | Yes                         |
| energy management function / load factor (TOU)            | Yes                         |
| number of tariffs   | 8                           |
| <b>Measuring inputs</b>                                   |                             |
| number of inputs / for voltage measurement                | 4                           |
| number of inputs / for current measurement                | 4                           |
| input voltage / between L and L / maximum                 | 690 V                       |
| input voltage / between L and N / maximum                 | 400 V                       |
| input current / maximum                                   | 10 A                        |
| <b>Supply voltage</b>                                     |                             |
| supply voltage / at AC                                    | 110 ... 230 V               |
| supply voltage / at DC                                    | 24 ... 250 V                |
| measuring range frequency / at the measurement inputs     | 42.5 ... 69 Hz              |
| type of voltage / of the supply voltage                   | AC/DC                       |
| <b>Inputs / Outputs</b>                                   |                             |
| number of analog inputs                                   | 0                           |
| number of digital inputs                                  | 2                           |
| number of analog outputs                                  | 0                           |
| number of digital outputs                                 | 2                           |
| <b>Communication</b>                                      |                             |
| protocol / is supported / IEC 61850                       | Yes                         |
| protocol / is supported / Modbus TCP                      | Yes                         |
| protocol / is supported / Modbus RTU                      | No                          |
| protocol / is supported / SNMP                            | Yes                         |
| protocol / is supported / OPC UA with PubSub              | Yes                         |
| communication function / Modbus RTU as master             | No                          |
| number of ports / of the Ethernet interface               | 1                           |
| product function / gateway function for Modbus RTU        | No                          |
| <b>Cybersecurity</b>                                      |                             |
| type of access control / role-based access control (RBAC) | Yes                         |
| product function / logging via Audit log                  | Yes                         |
| product function / logging via Security Eventlog          | Yes                         |
| service / as web server / HTTPS                           | Yes                         |
| product function / firmware identifier                    | Yes                         |
| <b>Time synchronization</b>                               |                             |
| type of time synchronization                              | NTP                         |
| <b>Mechanical Design</b>                                  |                             |
| width   | 96 mm                       |
| height  | 96 mm                       |
| depth   | 100 mm                      |
| weight  | 550 g                       |
| product feature / with display                            | Yes                         |
| fastening method / standard rail mounting                 | No                          |
| fastening method / wall mounting                          | No                          |
| fastening method / rack mounting                          | Yes                         |
| type of electrical connection                             | Screw terminals             |
| connectable conductor cross-section                       | 0.2 ... 2.5 mm <sup>2</sup> |
| <b>Degree of protection / protection class</b>            |                             |
| protection class IP / on the front                        | IP40                        |
| protection class IP / rear side                           | IP20                        |
| <b>Environmental conditions</b>                           |                             |
| ambient temperature / during operation                    | -25 ... +55 °C              |
| ambient temperature / during storage                      | -40 ... +70 °C              |
| <b>Approval certification</b>                             |                             |

|  |     |
|--|-----|
| certificate of suitability / CE marking  | Yes |
| certificate of suitability / UL approval | Yes |

#### Further information

**Information- and Downloadcenter (catalogues, leaflets,...)**

<http://www.siemens.com/energy-automation>

**Industry Mall (Online ordering system)**

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mfb=7KG9501-0AA01-2AA1>

**Service&Support (Manuals, Certificates, Characteristics, FAQs,...)**

<https://support.industry.siemens.com/cs/ww/en/ps/7KG9501-0AA01-2AA1>

**Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)**

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mfb=7KG9501-0AA01-2AA1](http://www.automation.siemens.com/bilddb/cax_en.aspx?mfb=7KG9501-0AA01-2AA1)

**Tender specifications**

<http://www.siemens.com/specifications>

