

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 GATEWAY FUNCTION ETHERNET INTERFACE AND COMMUNICATION PROTOCOL, RJ45 MODBUS TCP

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 / measurement of the voltage of harmonic components in the range 2 kHz ... 9 kHz	No
power quality assessment function / measurement of the voltage of harmonic components in the range 9 kHz ... 150 kHz	No
power quality assessment function / Total Harmonic Distortion (THD)	Yes
power quality assessment function / voltage dip	Yes
power quality assessment function / detection of asymmetry	Yes
power quality assessment function / detecting and visualization of voltage fluctuations	Yes
power quality assessment function / measurement of the harmonic phase angle	Yes
product feature / data evaluation according to EN 50160	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
number of sampling values / per 10 sampling cycles	2 048
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
Measuring inputs	
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
Supply voltage	
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
Inputs / Outputs	
number of analog inputs	0
number of digital inputs	2
number of analog outputs	0
number of digital outputs	2
Communication	
protocol / is supported / IEC 61850	No
protocol / is supported / Modbus TCP	Yes
protocol / is supported / Modbus RTU	Yes
protocol / is supported / SNMP	Yes
protocol / is supported / OPC UA with PubSub	Yes
communication function / Modbus RTU as master	Yes
number of ports / of the Ethernet interface	1
product function / gateway function for Modbus RTU	Yes
Cybersecurity	
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
Time synchronization	
type of time synchronization	NTP
Mechanical Design	
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 mm²
Degree of protection / protection class	
protection class IP / on the front	IP40
protection class IP / rear side	IP20
Environmental conditions	
ambient temperature / during operation	-25 ... +55 °C
ambient temperature / during storage	-40 ... +70 °C
Approval certification	
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?mlfb=7KG9501-0AA31-0AA1>

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

<https://support.industry.siemens.com/cs/ww/en/ps/7KG9501-0AA31-0AA1>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=7KG9501-0AA31-0AA1

Tender specifications

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

