SIEMENS

Data sheet

7KG9501-0AA01-2AA1



Multifunctional Power Quality Instrument SICAM Q100, PQI-A, Dimensions 96mm x 96mm x 100mm, Panel flush-mounting device with LCD, power supply voltage: DC 24 - 230 V / AC 110 - 230 V, 4 inputs AC voltage measurement 4 inputs AC current measurement 2 binary in-, 2 binary outputs, Web server for parameterization and visualization, . NTP time synchronization, . CE and UL certification, . 2 GB memory, Ethernet switch, Ethernet interface, RJ45, and communication protocols SNMPv3, Modbus TCP and IEC 61850 server Without serial communication interface

Figure similar

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 / according 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 / according 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
<u> </u>	400 V
input voltage / between L and N / maximum	10 A
input current / maximum	10 A
Supply voltage	440 000 //
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	Yes
protocol / is supported / Modbus TCP	Yes
protocol / is supported / Modbus RTU	No
protocol / is supported / SNMP	Yes
communication function / Modbus RTU as master	No
number of ports / of the Ethernet interface	1
product function / gateway function for Modbus RTU	No
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
	No
fastening method / rack mounting	Yes
fastening method / rack mounting	Screw terminals
type of electrical connection	
connectable conductor cross-section	0.2 2.5 mm ²
Degree of protection / protection class	ID 10
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

Siemens is working on the renewal of the current EAC certificates.

Please contact your local Siemens office on the status of validity of the EAC certification if you intend to import or offer to supply these products to an EAC relevant market (other than the sanctioned EAEU member states Russia or Belarus).

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=7KG9501-0AA01-2AA1

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?mlfb=7KG9501-0AA01-2AA1

Tender specifications

http://www.siemens.com/specifications

Power Academy - Your training and consulting partner in the area of power transmission and distribution https://www.siemens.com/poweracademy

