

Data sheet A1EM.NG9

Acquisition of electric field data for monitoring

Product description

The IoT transformer A1EM.NG transforms analogue electric values to digital field data that is available to be processed by the IoT Gateway family A1GW. A1EM.NG9 provides all field parameters to analyse the actual power input on the line as well as the IT-sided consumption scheme.

The Gateway collects the data via a digital interface. A1EM.NG9 offers up to 9 input channels, that may be read individually or clustered. According to a 3-phase topology one current may be accredited to one specific phase.

Flexible power supply by 230V~ or 24V= runs the system. The very compact design of the A1EM.NG9 needs no more than 90mm space on the mounting rail.



Application

- acquisition of electric power consumption
- evaluation of voltage quality
- management of net in- and output
- proactive avoidance of peak loads

Features

- 9 independent input channels
- transformation of electric values in IT processible data

Technical data

general data	voltage L1-N, L2-N, L3-N, L1-2, L2-3, L3-1, frequency
IoT data for each of 9 single channels	current, maximum current, active power (bidirectional), reactive power (bidirectional), apparent power, power factor, working quadrant, input active power, output active power, input inductive active power, input capacitive active power, output inductive active power, output capacitive active power
IoT data for up to 3 possible 3-phase cluster	each on a 3-phase basis: active power (bidirectional), reactive power (bidirectional), apparent power, power factor, input active power, output active power, input inductive active power, input capacitive active power, output inductive active power, output capacitive active power
voltage supply	90-250VAC 50/60Hz or 24-120VDC
power consumption	1,5VA max (AC) or 1,5W max (DC)
withstand voltage 6kV	between input channel and IT data interface
insulation 6kV	between input channel and IT data interface and voltage supply and IT data interface
operating temperature range	-10°C to +55°C

Accessories for IoT transformer A1EM.NG9

order ID	maximum values				application
	current (A)	line diameter (mm)	bundle diameter using more than one line (mm)	length of the measuring line (m)	
A1CT.10.1.02.01	10	6		2	acquisition of electric parameters in the cabinet (see FIG 1)
A1CT.100.1.02.01	100	16		2	
A1CT.200.1.02.01	200	24		2	
A1RC.2000.120.05.01	2000		120	5	acquisition of electric parameters in the cabinet (see FIG 2)
A1RC.4000.120.05.01	4000		120	5	
A1RC.2000.200.05.01	2000		200	5	
A1RC.4000.200.05.01	4000		200	5	
A1RC.8000.200.05.01	8000		200	5	
A1IO.NG9.AIN.01				2	acquisition of an analogue control voltage
A1IO.NG9.DIG.01				2	acquisition of a digital control voltage
A1IO.NG9.RTD.01				2	acquisition of PT100/1000 values
A1AC.CABLE.EXT.04.01				4	extension to the measurement line



FIG 1



FIG 2

