

RTU7M AI-3U3I – Power Quality Metering Card

General Description

This card is designed for measurement of voltages and currents in three-phase systems with consecutive evaluation of quality of electrical energy and associated pointers, what is providing a complex picture about distribution grid and energy stream. Measured data can be stored into database and then analyzed and evaluated in SW application ENVIS (free of charge). System can send regular reports about the power quality in given time period or can send automatic alarms, if some selected parameters exceed the set values.



Card RTU7M
AI-3UA/230/300-3IA/5A/7.5A-I

Typical Applications

- ❑ power quality metering,
- ❑ diagnosis and searching for causes of problems in network,
- ❑ remote monitoring of energy consumption or production.

Basic Features

- ❑ three or four independent voltage and current inputs (3x1p, 3p-wye, 3p-delta),
- ❑ energy meter supports 3 tariffs, single and three phase measurement in four quadrants for active and reactive energy,
- ❑ measurement U, I, P, Q, S, harmonic distortion power, PF, cos φ, symmetrical components, unbalance factor, THD, 50 harmonics, fundamental harmonics, frequency, active energy, reactive energy,
- ❑ 512MB memory for data logging,
- ❑ internal battery for 1-hour power backup,
- ❑ standards IEC61557-12, EN50160, class S (class A under development, check the availability with producer).

Technical Specification

Card	RTU7M AI-3UA/230/300-3IA/5A/7.5A-I
Voltage inputs number	3
Nominal range	3 × 230 V AC (wye, delta, aron)
Overloadability	300 V AC perm.
Range in RTU UC	4 ÷ 300 V
Current inputs number	3
Nominal range	3 × 5 A AC
Overloadability	10 A AC perm., 90 A AC for 1s
Range in RTU UC	0,0125 ÷ 7,5 A AC
Measuring accuracy	class S (class A under development, check the availability with producer)
Consumption	1W
Connectors	1× WAGO 231-536/108-000, 1× WAGO 231-935/001-000 (part of delivery)
Wire cross-section	0,08 ÷ 2,5 mm ²
Position in bus	Any

Front panel RTU7M
AI-3UA/230/300-3IA/5A/7.5A-I

