

# NETWORK ANALYZER AHM3

## GENERAL FEATURES

- DIN SIZE 96 x 96 mm.
- 13 ADDITIONAL MODULES.
- 4 INTERFACES FOR MODULES.
- THD on V and I.
- HARMONIC RMS (1-63th)
- MAXIMUM DEMAND, A, kW, kVA, kvar.
- MAXIMUM AND MINIMUM VALUES.
- PROGRAMMABLE RATED V AND I
- 4 QUADRANT MEASUREMENT.
- WAVEFORM



ELECTRICAL PARAMETER	UNIT	L1	L2	L3	TOTAL	MAX/MIN	DEMAND
Voltage (Line-to-neutral)	V, kV	•	•	•	•	•	
Voltage (Line-to-Line)	V, kV	•	•	•	•	•	
Current	A, kA	•	•	•	•	•	•
Neutral current	A, kA	•	•	•	•	•	
Active power (P)	kW, MW, GW	•	•	•	•	•	•
Reactive power (Q)	kvar, Mvar, Gvar	•	•	•	•	•	•
Apparent power (S)	kVA	•	•	•	•	•	•
Power factor (Cos φ)	PF	•	•	•	•	•	
Frequency	Hz				•		
Import active energy (EP+)	kWh, MWh, GWh				•		
Export active energy (EP-)	kWh, MWh, GWh				•		
Reactive energy (Q1, Q2, Q3, Q4)	kvarh, Mvarh, Gvarh				•		
Backup energy	kWh				•		
Hour meter	h: min				•		
THD Current and Voltage	A, V	•	•	•			
Harmonic RMS-U and I (1-63th)	%	•	•	•			
Unbalance-U and I	%				•		

## Additional modules

### COMMUNICATION PROTOCOL

DM10	Profibus-DP V0
DM11	Ethernet: Modbus/TCP
DM12	Wifi: Modbus/TCP
DM13	GPRS: Modbus/TCP, SMS

### DIGITAL I/O

DM6	2 digital inputs + 2 digital outputs
DM7	4 digital inputs
DM8	2 relay outputs
DM9	1 AC digital input

### ANALOG I/O

DM2	2 analog inputs: mA
DM5	2 analog outputs: mA

### TEMPERATURE MEASUREMENT

DM3	2 analog inputs: PT100
DM4	2 analog inputs: TC (J, K or E)

### DATA RECORDER

DM1	Memory: 8MB, include RTC
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The **AHM3** is designed to be used for the measurement and calculation of electrical variables such as **voltage, current, frequency, power, power factor, energy, harmonic components, etc.** in low, medium and high voltage power distribution.

It is capable of **single-phase, two-phase, or three-phase** measurement and can be used in two-wire, three-wire, four-wire, TN, TT and IT systems. There are **four interfaces** on the meter for modules which are used to extend functions.

INPUT	
Rated voltage (Un)	3 x 400 / 690 V AC
Overload	1,2 Un
Impedance	> 1MΩ
Rated Current (In)	1 A and 5 A
Overload Continuous	2 In
Overload Instantaneous	10 In/5s or 20 In/1s
Burden	< 0,1 VA
Rated value	< 20 mΩ

AUXILIARY VOLTAGE	
Aux. V. AC/DC	80 - 270 V
Burden	< 10 VA

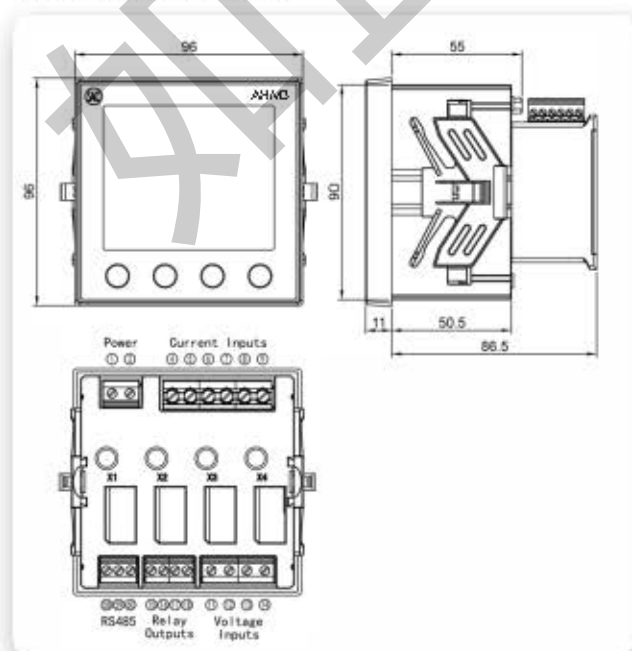
OUTPUT	
Relay output	250V/5A AC, 30V/5A DC
Isolation	2500 V AC
Energy pulse width	80 ± 20% ms
RS 485 port	Modbus-RTU
Baud rate	Up to 38400 bps programmable



Up to **4** modules combined at your choice at the same time

GENERAL FEATURES	
Case material	ABS, UL94 V0
Dimensions	DIN 96 x 96 mm
Terminals	Pluggable
Max. wire section	2,5 mm <sup>2</sup>
Weight	0,4 Kg
Protection	IP 65 - front panel
	IP 20 - meter body
Operating temperature	-10 - 60 °C
Storage temperature	-25 - 70 °C
Relative humidity	5 - 95 %

## Dimensions



## Accuracy

PARAMETER	OPERATING RANGE	ACCURACY
Voltage	2,5-120 %	0,2 %
Current	0,005-6 A	0,2 %
Active power	1-120 %	0,2 %*
Reactive power	1-120 %	0,2 %*
Apparent power	1-120 %	0,2 %*
Power factor	± 0,5 %	0,5 %
Frequency	45-65 Hz	± 0,01 Hz
Active energy	5-120 %	Class 0,5 S
Reactive energy	5-120 %	Class 2

\* Class 0,2 (25°C) and Class 0,5 (-10 - 60 °C)