

Precision Power and Power Quality Analyser

PA2000TM

PQ ANALYSIS |
DIGITAL FAULT RECORDER |
PHASOR MEASUREMENT UNIT

neo
MESSTECHNIK



Powerful tool for smart industrial power, power quality analysis and data acquisition

Enhancing energy efficiency through accurate power analysis —

PA2000™

PA2000 provides a wide range of power analysis functions, offering stable and accurate analysis environment through NEOMEZ's NEOServer technology and highly precised modules. High-speed data processing capabilities serves an optimized solution for various power systems—including electric vehicles, power plants, and smart grids.

Specifications

- Power Quality: Class A
- Sampling Rate: 1 MS/s
- Accuracy: 0.05%
- Resolution: 18-bit
- Category: CAT III 1000V, CAT IV 600V
- Data processing : Flexible report

Core Features

- High performance rack mountable with expandable modular type
- Precision measurement with 18bit resolution and 1MS/s sample rate
- Fault recorder and data streaming
- Measurement and analysis
- FFT, Harmonic analysis
- 8 Voltages(+/-1600V) and 8 currents per module
- DIO and CAN2.0 or MODBUS RS-485 communication port for additional sensor connection (optional)



INDUSTRIAL POWER ANALYZER

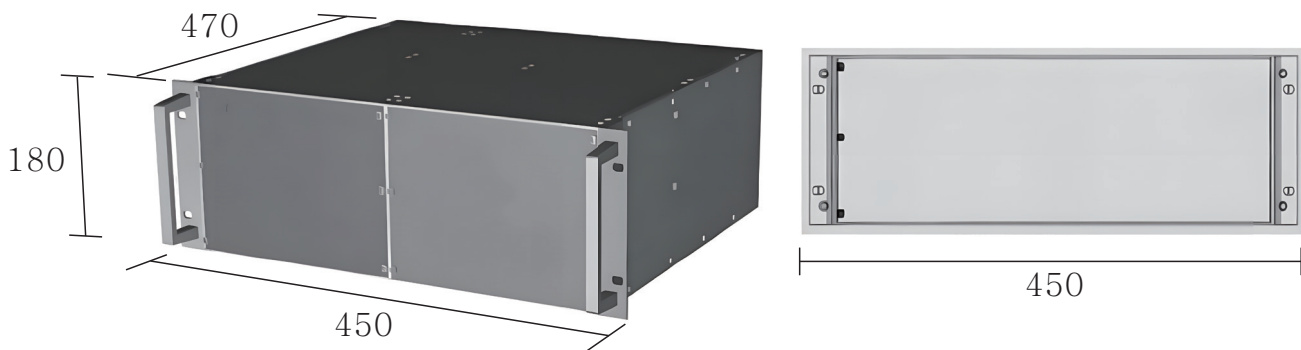
Applications

- Power quality analyser & Phasor measurement unit
- Power measurement
- Power fault recorder & Digital fault recorder
- Photovoltaic & wind power analysis and reporting
- Frequency converter & inverter power analysis

Benefits

- PA2000 can analysis very accurate power quality and transient signal precisely and GPS synchronized measurement is possible
- Expandable 12 slot can be installed with many differnet cards
- Available the remote access and control with Ethernet and Wireless connection (WiFi option)

Technical Drawing



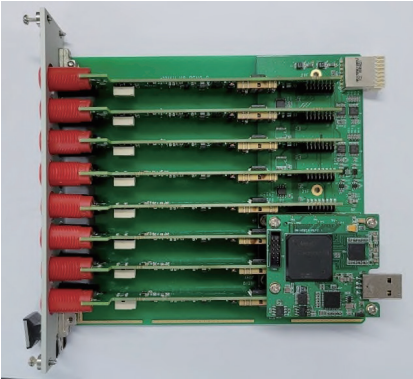
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Specifications

Voltage input	Channel	8ch per module	
Current input	Range	±1600V/±800V	
Digital input	Channel	8ch per module	
RS-485	Clamp	Range(Gain)	10VMAX (1/2/5/10)
CAN2.0B	Rogowski coil	Range(Gain)	2VMAX (1/10/100/1000)
Measurement parameters	Direct current input	Range	10A MAX
Measurement values	Channel	Isolated 64Ch	
Evaluation online	Configuration	40V Programmable Schmitt trigger	
Data processing	Channel	Isolated 4Ch	
Hardware processing	Channel	Isolated 4 Ch	
Data storage	Resolution	18bit	
Communication ports	Sampling rate (per channel)	1MS/s	
Dimensions	Phase voltages (or Line voltages), Neutral voltage,		
Power supply	Phase currents, Neutral current, Earth current		
Temperature	Web interface, Recorder, Scope, Harmonics, Actual value		
	Flexible report generator on the web: EN50160, IEC 61000-2-4 Class 1,2,3,		
	IEC 61400-12-1, IEC 61400-21, ISO 50001 Energy report, Diagram		
	CPU: Intel or AMD, RAM: 32GB		
	Ethernet: 1/100/1000 Base T, OS: Microsoft Windows		
	SSD 1TB		
	USB x 4, HDMI, GPS, LAN, WLAN		
	19 inch, 4U		
	100~240VAC/47~63Hz		
	Top: 0~+50°C, T.store: -30~+70°C		

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8 CH High voltage input



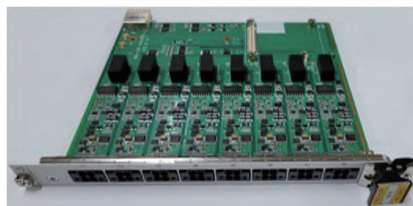
- Model:NM4U-HV8-1M18
- Inputrange: $\pm 1600\text{Vdc}$
- Samplerate:1MS/sec
- Resolution:18-bit
- Isolationvoltage:5kV

8 CH Current input



- Model:NM4U-CD8-1M18
- Inputrange:10A
- Samplerate:1MS/sec
- Resolution:18-bit
- Isolationvoltage:4kV

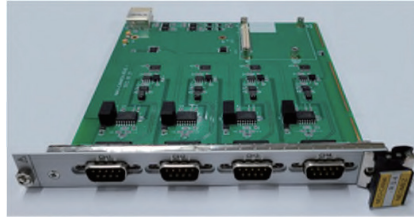
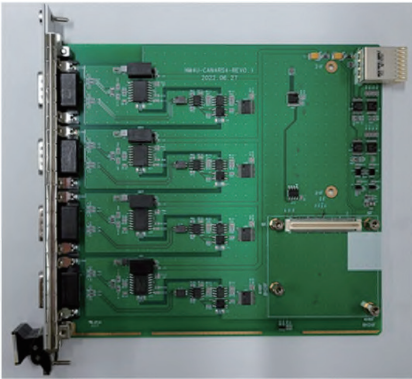
8 CH Low voltage/current



- Model:NM4U-LV8I-1M18
- Inputrange: $\pm 10\text{Vdc}$ or 20mA
(changeablebyadipswitch)
- Samplerate:1MS/sec
- Resolution:18-bit
- Isolationvoltage:1kV

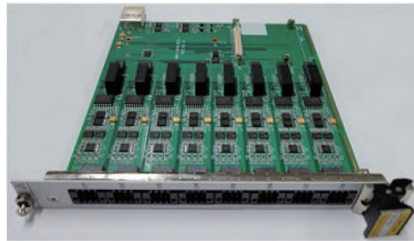
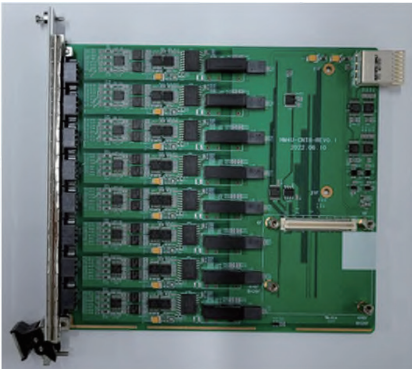
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4 CHCAN input



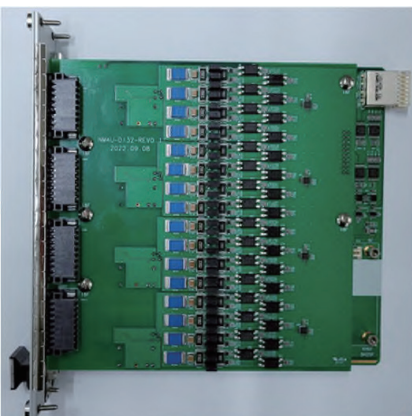
- Model : NM4U-CAN4RS4
- CAN2.0B&RS-485
- Samplerate:1MS/sec
- Isolationvoltage:1kV

8CHCounterinput



- Model:NM4U-CNT8
- Samplerate:1MS/sec
- Resolution:32-bit
- Isolationvoltage:1kV

64CHDigitalinput



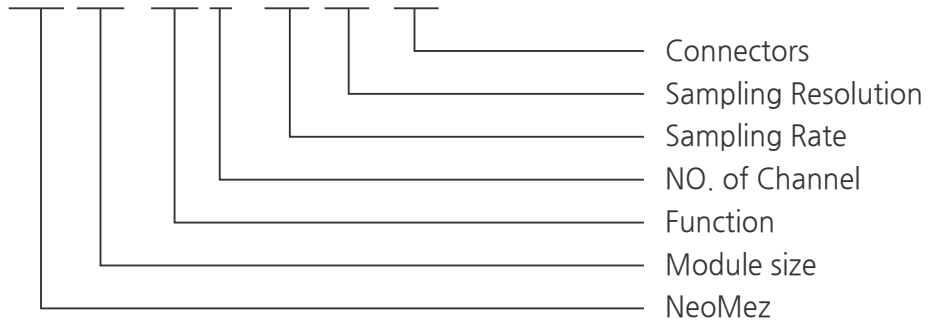
- Model:NM4U-DI64
- DryorWetcontact
- Isolationvoltage:1kV

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Module naming

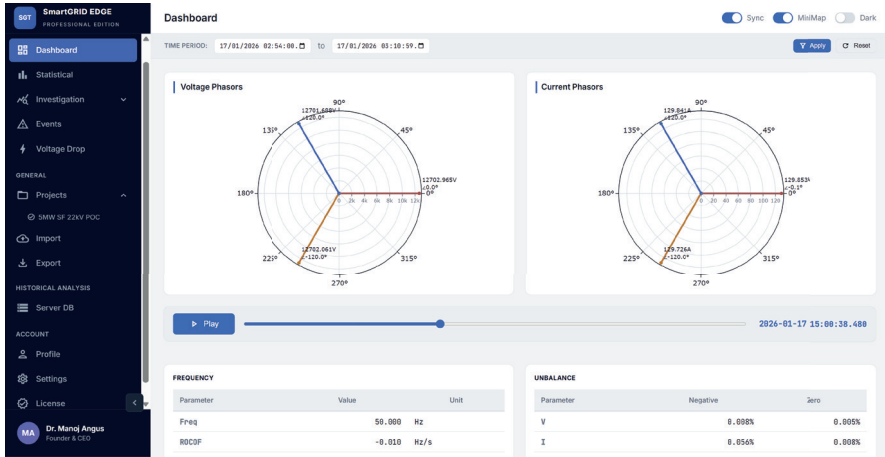
NM4U-HV8-1M18-BL



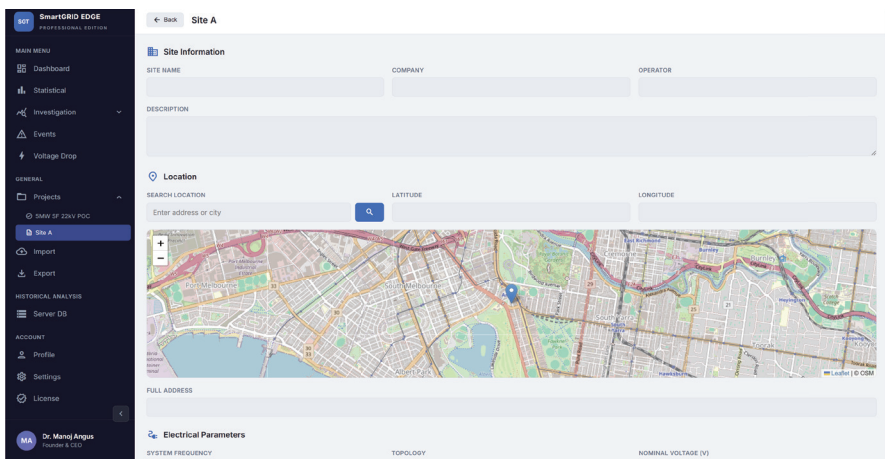
Function	NO. of Channal	Sampling	Sampling	Connectors
CPU : CPU	2 : 2Ch	40K : 40KHz	16 : 16Bits	B : Banana
UPS : UPS	4 : 4Ch	114K : 40KHz	18 : 18Bits	L : LEMO
BAT : Battery	8 : 8Ch	200K : 40KHz	24 : 24Bits	S : Screw
HV : High Voltage	16 : 16Ch	1M : 40KHz		D : DSUB
LV : Low Voltage	24 : 24Ch	10M : 40KHz		
CS : Current Sensor	32 : 32Ch			
CD : Current Direct	64 : 64Ch			
CNT : Counter				
CAN : CAN				
TH : Thermocouple				
BR : Bridge				

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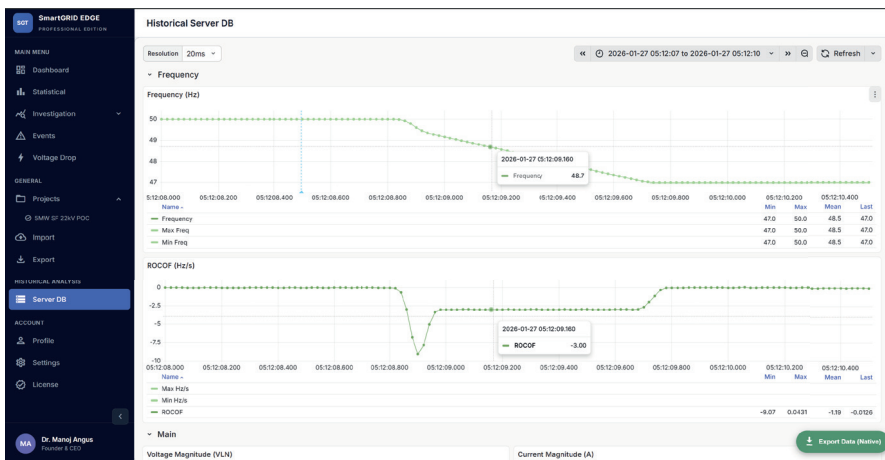
Wide Area Monitoring System



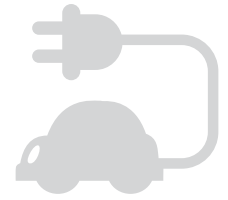
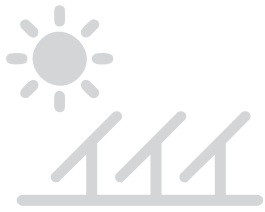
- Power Quality: Class A
- Subharmonics
- Harmonics
- Interharmonics
- Supraharmonics 500 kHz
- Grid Impedance



- IEC Reporting (IEC61000-2-2 etc.)
- IEEE Reporting (IEEE519 etc.)
- Grid Codes (AEMO, EN50160 etc.)
- Fault Recording
- Fault Detection



- Phasor Measure Unit
- Oscillation Detection
- 10 ms Disturbance Data
- Raw Data



CONTACT

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