

Energy and Power Meter Range

The new generation of NEMO energy and power analysers

AUTOMATION AND SPECIALIST SOLUTION





Precise Measurement

Partnered with leading global manufacturers, NHP has been active in energy monitoring for over forty years.

NHP's intimate industry knowledge combined with our comprehensive product solution offering and local support makes NHP a valuable partner. With NHP, you have confidence to take on the most demanding of challenges, particularly when it comes to the continual evolving energy management industry.

Providing technical expertise to support selection, commissioning and product support across all areas of Australia and New Zealand our goal is to ensure customers and their respective clients achieve their energy efficiency goals.

NEMO Family of Energy and Power Meters



NEMO D4LE

NEMO D4LE

The NEMO D4-LE is a compact 4 DIN module multifunction meter measuring all system variables including harmonic currents and voltages up to the 50th harmonic order. This series provides the options for pulse output, native serial Modbus RTU or native BACnet MS/TP communication protocol.

- High accuracy - Class 0.5 active energy (IEC 61557-12)
- DIN rail mount
- THD up to the 50th harmonic order
- Choice of pulse output, Modbus RTU, Modbus TCP or BACnet MS/TP communication protocols



NEMO 96HD

NEMO 96HD

The NEMO 96HD is a modular three-phase multifunction meter with optional input and output modules for analogue and digital signals and communication modules for Modbus and BACnet MS/TP communication protocols. Measuring harmonic current and voltages up to the 50th harmonic order, the NEMO 96HD series is the number one choice for energy and power metering.

- High accuracy - Class 0.5 active energy (IEC 61557-12)
- Panel mount (96 x 96 mm)
- Modular multifunction meter with digital and analogue I/O modules
- THD up to the 50th harmonic order
- Choice of Modbus RTU (with or without in-built memory) or BACnet communication protocols



NEMO 96EA

NEMO 96EA

The Nemo 96EA power analyser features an 8MB built in memory to allow the storage up to 3000 events as well as energy consumption and real-time variables.

In addition to energy and power measurements, the NEMO 96EA captures critical events such as voltage dips, interruptions, sags/swells, flicker, rapid voltage change and THD analysis (individual harmonic analysis up to 40th harmonic).

Suitable for LV and MV/HV applications (voltage connection to meter via voltage transformer with maximum primary voltage: 300 kV)

- High accuracy - Class 0.5 active energy (IEC 61557-12)
- Panel mount (96x96 mm)
- Provided with Modbus RTU communication as standard
- Modular multifunction meter with digital and analogue I/O modules
- Individual and THD up to the 40th harmonic order
- 8MB in-built memory
- Capture power quality events such as voltage dips, voltage interruption, voltage swells, flickers and rapid voltage change



NEMO Family of Energy and Power Meter Selection Guide



	NEMO D4LE		NEMO 96HD	NEMO 96EA
Part Number				
Aux: 80...265V AC/ 110...300 Vdc	MFD4411	No comms	NEMO96HD	MFQ96021
	MFD4421	Modbus RTU		
	MFD44B1	BACnet MS/TP		
Aux: 11...60V DC	*Contact NHP		MF96002	MFQ96022
Voltage Rating	80 - 500V (phase to phase)		80 - 500V (phase to phase)	80 - 690V (phase to phase)
Accuracy Class IEC 61557-12	Active Energy: 0.5 Reactive Energy: 1		Active Energy: 0.5 Reactive Energy: 2	Active Energy: 0.5 Reactive Energy: 1
Four quadrant monitoring	Yes		Yes	Yes
Harmonics	THD up to 50th harmonic		THD up to 50th harmonic	THD & individual harmonic up to the 40th
VT Ratio Setting	1...10 Max. VT primary voltage: 1200V		1...10 Max. VT primary voltage: 1200V	1...3000 Max. VT primary voltage: 300 kV
Power Analyser Measurements	-		-	Voltage dips; voltage interruption; voltage swells; flickers; rapid voltage change
Memory	-		Memory module needed	Built-in 8MB Store up to approx. 14 months with 5min interval, 42 months with 15 min interval - Quality events: 100kB (4000 events)
Real Time Clock	-		With memory module	Yes
Communications				
RS485 Modbus RTU	Native to MFD4421		IF96001	Provided with meter as standard
Modbus TCP	-		IF96015	IF96015
BACnet MS/TP	Native to MFD44B1		IF96014	IF96014
Memory + RS485 Modbus RTU	-		IF96012	8MB memory on board
Mounting	DIN Rail		Panel Mount (96 x 96mm)	Panel Mount (96x96mm)

NEMO meters with Rogowski Coil

Perfect for retrofit applications, the NEMO range is also available with rogowski coil solution. The Rogowski Coil provides accurate measurements over a wide operating range, and this is selectable on the NEMO meter from the ranges 20-1000A, 60 – 3000A and 100-5000A. This powerful combination makes selection and application very easy.

Each kit below comes with 1x multifunction NEMO D4-Le or NEMO HDLe and 3x Rogowski current coils (kit part number dependent upon the diameter selection of the rogowski coils - 80mm, 142mm or 190mm) with 3m cable length provided for connection of the rogowski coil to the meter.

Please note: The Rogowski Coils are not sold separately.

NEMO D4LE with Rogowski Coil



NEMO 96HDLE with Rogowski Coil



Part Number	NEMO D4LE with Rogowski Coil	NEMO 96HDLE with Rogowski Coil
kit with Rogowski coils Ø 80mm ¹⁾	KRNEMOD4LE080	KRNEMOHDLE080
kit with Rogowski coils Ø 142mm ¹⁾	KRNEMOD4LE142	KRNEMOHDLE142
kit with Rogowski coils Ø 190mm ¹⁾	KRNEMOD4LE190	KRNEMOHDLE190

Input Voltage	80...500V	80...500V
Auxiliary	80...265Vac+110...300Vdc	80...265Vac+110...300Vdc
Outputs	Pulse or alarm + RS485 Modbus RTU	RS485 Modbus RTU provided as standard. 1x additional plug in module can be selected ²⁾

¹⁾ 3 selectable current ranges: 20...1000A, 60...3000A, 100...5000A

Length of cable to connect rogowski coil to meter is **3 metres**.

²⁾ Compatible with plug in modules IF96001, IF96002, IF96012, IF96014 and IF96015. Refer following page 6, Accessories.

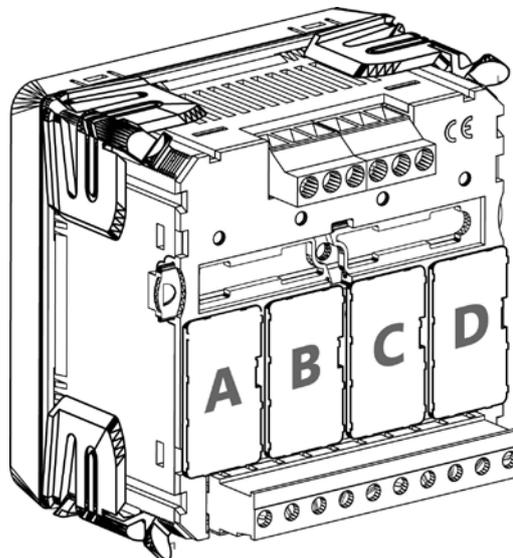
Note – only one additional plug in module can be used with the NEMO 96HDLE meter.

Accessories

NEMO 96HD and NEMO 96EA plug in modules

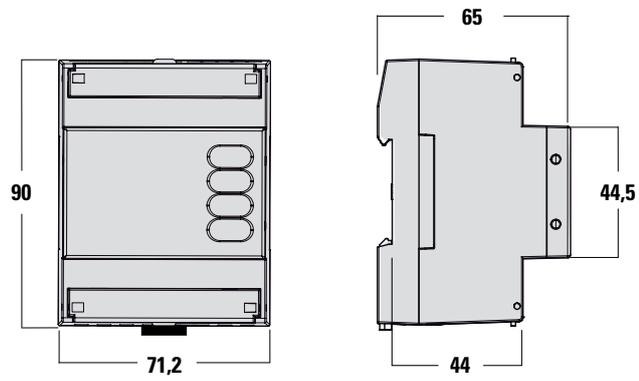
Description	QTY max.	Part Number	Part Number			
			A	B	C	D
RS485 Communication	1	IF96001	•			
RS232 Communication	1	IF96002	•			
2 Energy pulse outputs	2	IF96003	•	•	•	•
2 Analogue outputs 0/4...20mA	2	IF96004			•	•
2 Alarms	2	IF96005	•	•	•	•
Neutral current	1	IF96006			•	
2 IN / 2 OUT 24V DC	2	IF96011			•	•
Memory + RS 485 1)	1	IF96012	•			
BACNET MS/TP 1)	1	IF96014	•			
Modbus TCP	1	IF96015	•			
Temperature measure	1	IF96016				•

¹⁾ Module compatible with NEMO 96HD model only

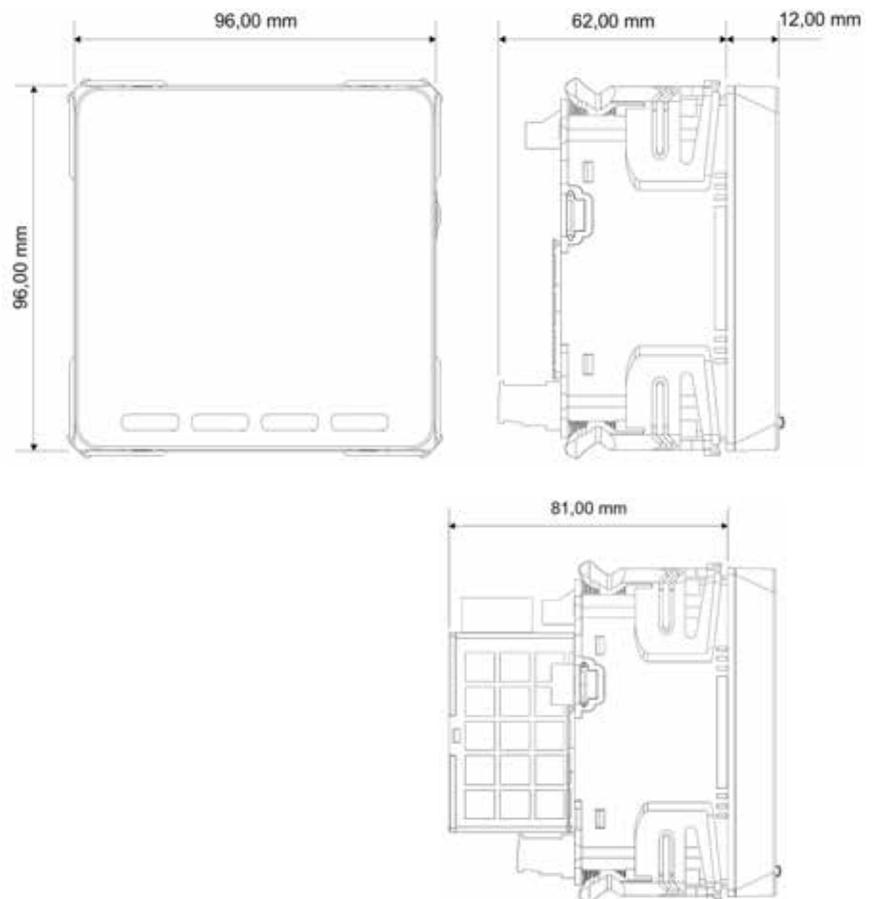


Dimensions

NEMO D4LE



NEMO 96HD and NEMO 96EA



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