



# Measure, Plan and Improve Operating Efficiencies

## Easy Select Meter Chart



Current transformers and transducer accessories available from NHP

	SINGLE PHASE ENERGY METERS			THREE PHASE DIRECT CONNECT ENERGY METERS		THREE PHASE CT CONNECT ENERGY METERS		
	Direct connect 45A Electromechanical kWh counter	Direct connect 45A LCD touch display energy meter	Direct connect 100A LCD touch display energy meter	Direct connect 63A Advanced energy meter with optional inputs for gas and water metering <sup>1)</sup>	Direct connect 100A energy meter	CT connect Energy Meter and Retrofit option available	CT connect 3-in-1 Energy Meter and Retrofit option available	CT connect Advanced energy meter with optional inputs for gas and water metering <sup>1)</sup>
	<b>EM110</b>	<b>EM111</b>	<b>EM112</b>	<b>EM24DIN</b>	<b>CONTO D6</b>	<b>EM210 / EM2172R</b>	<b>EM270 / EM271</b>	<b>EM24DIN</b>
Base meter with no communication	EM110DINAV81XO1X	-	-	EM24DINAV93XR2X	CE6DT1252	EM21072DAV53XOXX	-	EM24DINAV53DR2X
Meter with RS485 modbus RTU	-	EM111DINAV81XS1X	EM112DINAV01XS1X	EM24DINAV93XISX	CE6DT1256	EM21072DAV53XOSX	EM27072DMV53X2SX <sup>2)</sup>	EM24DINAV53DISX
Meter suited to retrofit applications	-	-	-	-	-	EM2172RVV.XOSX <sup>2)</sup>	EM27172DMV53X2SX <sup>4)</sup>	-
Active energy accuracy / IEC 62053-21	Class 1	Class 1	Class 1	Class 1	Class 1	Class 1	Class 1	Class 1
Maximum demand power	-	✓	✓	✓	✓	-	✓	✓
Four quadrant monitoring	-	✓	✓	✓	✓	-	-	✓
Power factor	-	✓	✓	✓	✓	✓	✓	✓
DIN rail mount	✓	✓	✓	✓	✓	✓	✓	✓
Panel mount	-	-	-	with 4DIN96ADAPTOR	-	-	✓	with 4DIN96ADAPTOR

	THREE PHASE MULTI-FUNCTION METERS (MFM)			POWER ANALYSERS		ENERGY MANAGEMENT		
	LCD advanced DIN-rail MFM	LCD panel mount MFM	LCD panel mount MFM	LCD advanced MFM and Power Analyser	Power analyser 1426 Series	Branch circuit monitoring solution	MODBUS TCP/IP gateway and data logger	Energy management software
	<b>Nemo D4 LE</b>	<b>Nemo 96HD</b>	<b>WM40</b>	<b>NEMO 96 EA</b>	<b>PM5000</b>	<b>WM50 BCMS</b>	<b>VMU-C</b>	<b>InfoSyte™ or EM<sup>2</sup>-Server</b>
Base meter with no communication	MFD4411	NEMO96HD	WM40AV53H	-	*Contact NHP	WM50AV53HBC	VMUCEMAWSSUX	*Contact NHP
Meter with RS485 Modbus RTU	MFD4421	Base meter plus add-on module <sup>3)</sup>	Base meter plus add-on module <sup>3)</sup>	MFQ96021	-	• Base meter part no. WM50AV53HBC	-	InfoSyte™
Meter with RS485 BACnet RTU	MFD44B1	Base meter plus add-on module <sup>3)</sup>	Base meter plus add-on module <sup>3)</sup>	MFQ96021 + IF96014	-	• 12 x channel current transformer part no. TCD12B532AX	-	• Cloud hosted software
Active Energy Accuracy / IEC 62053-21	Class 0.5	Class 0.5	Class 0.5	Class 0.5	Class 0.2	• Cable connection for TCD12, TCD12WSS2T1XXX <sup>7)</sup>	-	• Customisable dashboards
Maximum demand	✓	✓	✓	✓	✓	• WM50 can connect to 8 x TCD12 CTs, therefore monitor up to 96 single phase loads or any combination of single and three phase loads up to 96 channels.	• Web based data logging	• VABERS reporting available
Four quadrant monitoring	✓	✓	✓	✓	✓	• Quick and easy to install and configure	• Live dashboard	• Smart alarms and alerts
Power factor	✓	✓	✓	✓	✓	• Channel load measurement: A, THD current, W/var/VA, PF, kWh	• Connects to 32x meters	• Fault detection and diagnostics
Total harmonic distortion	THDI & THDV up to 50th harmonic	THDI & THDV up to 22nd harmonic	THDI & THDV up to 32nd harmonic	THDI & THDV up to 40 <sup>th</sup> harmonic	THDI, THDV up to 127th harmonic	• Event and data log with onboard memory	• Remote database cloud storage	• Connect to data via gateway flat file or API
Other			Up to 16 x configurable alarms	Measurement of: • Voltage dips • Voltage interruption • Voltage swells • Flickers • Rapid voltage change	Measurement of: • Sag and swell detection • Flicker • Waveform log • Transient voltage and currents (M8 version) • THD and individual harmonics up to the 127 <sup>th</sup> (M8 version)	• 16 internal alarms	• Easy to configure	EM <sup>2</sup> -Server
<b>Add-on communication module</b>							• E-mail data	• Cloud based service
RS485 Modbus RTU	Native to meter	IF96001	MC485232	Included as standard	On request		• Transfer data via FTP, HTTP or Modbus TCP	• Connects up to 100x VMU-C's
Modbus TCP/IP	-	IF96015	MCETH	IF96015	Native to meter		• Ability to send data over 3G (via 3G modem)	• Multi-site applications
BACnet MS/TP	Native to meter	IF96014	-	IF96014	-			• Live dashboards
BACnet IP	-	-	MCBACIP	-	-			All meter information exportable in .csv
Memory + RS485 Modbus RTU	-	IF96012	MC485232M	Memory built in 8 MB	-			
Memory + MODBUS TCP/IP	-	-	MCETHM	Memory built in 8 MB	-			
Memory +BACnet IP	-	-	MCBACIPM	-	-			

<sup>1)</sup> Inputs for gas and water metering available on EM24DINAV\*\*\*ISX model

<sup>2)</sup> Replace ... with '23' for 3x 90A split core CT's; '33' for 3x 150A split core CT's; '53' for 3x 250A split core CT's

<sup>3)</sup> Solid core current transformers to suit EM270 - TCD1X160200CMX (160A primary); TCD2X250200CMX (250A primary); TCD3X360200CMX (630A primary)

<sup>4)</sup> Split core current transformers to suit EM271 - TCD1M10080CMX (100A primary); TCD2M20080CMX (200A primary); TCD3M40080CMX (400A primary)

<sup>5)</sup> Communication module part number needs to be ordered along with base multi-function meter. Example: Want WM40 meter with RS485 Modbus RTU = WM40AV53H and MC485232

<sup>7)</sup> Replace "xxx" with either 030, 050, 100, 200, 300 or 500 for desired cable length in cm.

<sup>8)</sup> Four quadrant monitoring not available for NMI version

