

Energy Analyzers and Meters



NDM30 - NDM30 Lora DIN Rail Type
Single-Phase Electricity Meter

Energy Analyzers and Meters

DIN Rail and Panel Type Energy Meters

Energy meters are devices that provide perfect readability with a white backlit LCD display, and are used for single-phase and three-phase energy measurements in residential and utility applications.

These devices measure and display various important electrical parameters, and also offer a communication port for remote reading and monitoring.

The bidirectional energy measurement feature makes them an ideal option for solar energy measurements as well.

Additionally, models with LoRa communication capability are available, as well as prepaid or generator tariff options.

Application Areas

- Shopping Malls
- Marinas
- Residences
- Airports
- Factories
- Holiday Resorts
- Prisons
- EV Charging Stations

Advantages

- Class 0.5 and Class 1 applications

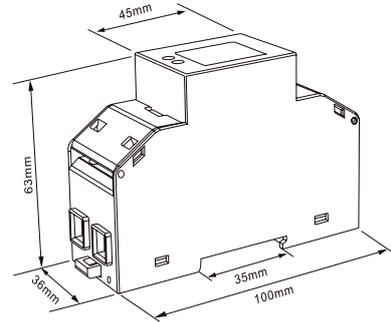
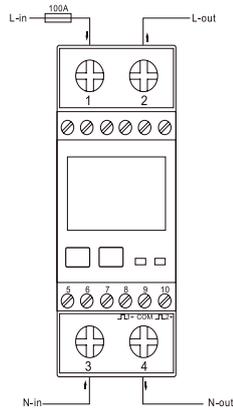
- Competitive pricing
- Compatibility with all software via Modbus RTU protocol
- Measurement capacity up to 100 Amps
- Bidirectional measurement capability
- Smaller footprint compared to competitors
- High measurement accuracy classes
- Wide measurement range
- Billing of high-cost liquid fuels with generator tariff option
- Advantage of collecting payments from prepaid subscribers
- DIN rail mounting (35mm)
- Wide range of solutions: direct connection and current transformer models
- RS485 (Modbus) or wireless data transmission (LoRaWAN communication)
- Savings on cabling and labor costs
- Fewer failure points due to wireless feature
- Convertible to modular or panel type solutions (only with additional equipment for NDM70 series)
- Advantage of collecting payments from subscribers and prepaid collection
- Compatibility with direct connection and CT models with a wide range of solutions
- White backlit LCD display
- Scroll settings display feature
- Support for AMR (Automatic Meter Reading) and SCADA systems
- Multifunctional measurement
- Easy payment collection (prepaid type)



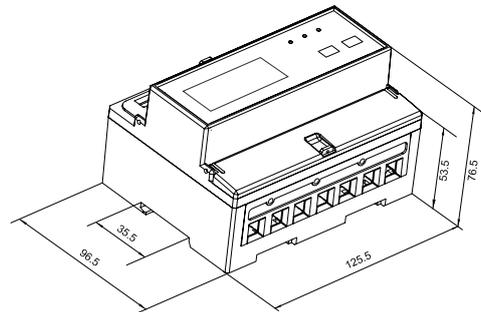
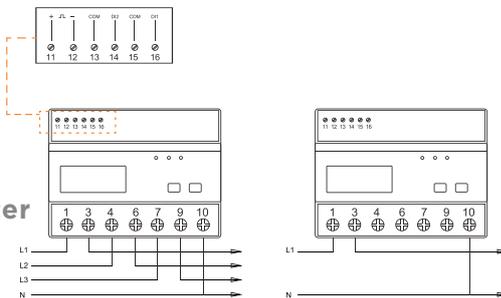
Energy Analyzers and Meters

Wiring Diagram - Dimensions for DIN Rail and Panel Type Energy Meters

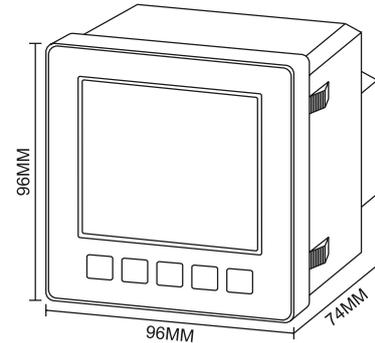
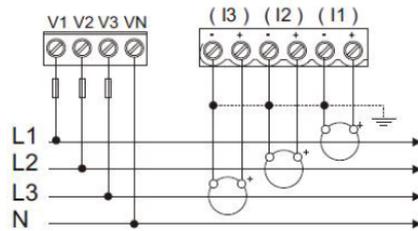
NDM30 - NDM30 Lora
DIN Rail Type Single-Phase Electricity Meter



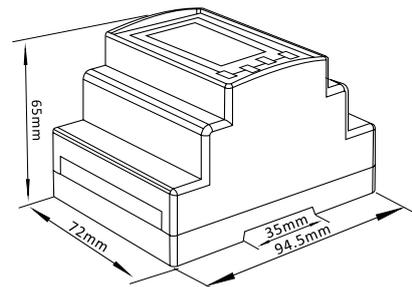
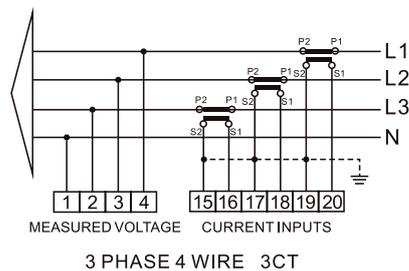
NDM50
NDM50 Lora
DIN Rail Type Three-Phase Electricity Meter



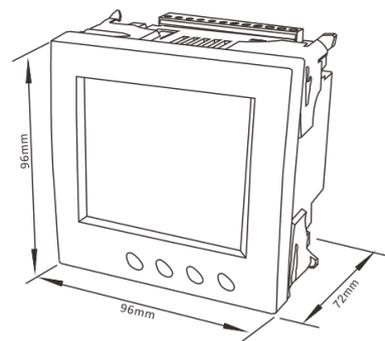
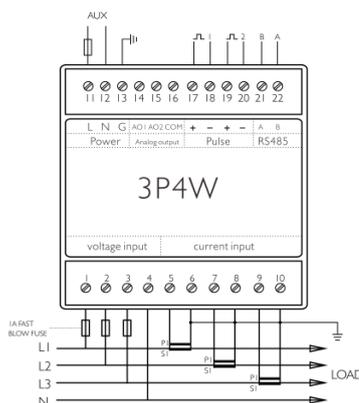
NPM270BX
NPM270BX-ETH
Series Panel Type Energy Analyzers



NDM70
NDM70 Lora
DIN Rail Type Three-Phase Electricity Meter



NPM290-5G
NPM290-5J Series
Panel Type Energy Analyzers



Energy Analyzers and Meters

NDM30 - NDM30 Lora DIN Rail Type Single-Phase Electricity Meter

	MODEL	
	NDM30	NDM30 Lora
Standards		
IEC62053-21	✓	✓
EN50470-1/3	✓	✓
IEC62053-23	✓	-
EN61326-1:2013	✓	-
EN61326-2-3:2013	✓	-
EN 61010_1:2010+A1:2019	✓	-
EN 61010-2-30-2010	✓	-
IEC 61000-4-3	-	✓
EN55022	-	✓
EN61326-1:2013 ve EN61326-2-3:2013	-	✓
EN 61010_1:2010+A1:2019 ve EN 61010-2-30-2010	-	✓
Specifications		
Nominal Voltage	120V or 230V AC	120V or 230V AC
Operating Voltage Range	80% - 120%	80% - 120%
Maximum Rated Current (Imax)	100A	100A
Operating Current Range	0.4% Ib - Imax	0.4% Ib - Imax
Overcurrent Withstand	30 Imax for 0.01 seconds	30 Imax for 0.01 seconds
Operating Frequency Range	50 Hz	50 or 60 Hz
Internal Power Consumption	< 2W / 10 VA	≤ 2W / 10 VA
Pulse Output 1	1000 imp/kWh (configurable)	1000 imp/kWh (configurable)
Pulse Output 2	1000 imp/kWh	1000 imp/kWh
AC Voltage Withstand	4 kV for 1 minute	4 kV for 1 minute
Protection Class	IP51	IP51
Impulse Voltage Withstand	6 kV - 1.2 μs waveform	-
Display	Backlit LCD	Backlit LCD
Maximum Reading	99,999.99 kWh	99,999.99 kWh
Accuracy		
Voltage	0,5%	0,5%
Current	0,5%	0,5%
Frequency	0,2%	0,2%
Power factor	1,0%	1,0%
Active Power	1,0%	1,0%
Reactive Power	1,0%	1,0%
Apparent Power	1,0%	1,0%
Active Energy	1,0%	2,0%
Environment		
Operating Temperature	-25°C to +55°C	-25°C to +55°C
Storage/Transport Temp.	-40°C to +70°C	-40°C to +70°C
Reference Temperature	23°C ± 2°C	23°C ± 2°C
Relative Humidity	0% to 95%, non-condensing	0% to 95%, non-condensing
Installation Category	CAT II	CAT III
Electromagnetic Environment	M1	M1
Pollution Degree	E2	E2
Communication		
Interface Standard & Protocol	RS485 Modbus RTU	LoRaWAN Specification 1.0.2
Frequency	-	EU868 / AS923 / AU915 / US902 / CN470 / CN433
LoRaWAN Classes	-	Class C
Automatic Upload	-	Max. 19 parameters
Auto Upload Interval	-	Configurable
Activation Method	-	OTAA or ABP
Output Power	-	13 dBm during transmission
Encoding Format	-	ASCII
Communication Range	Max 1200 m	1500 m in open area



Headquarters

Bayraktar Bul. Şehit Sok. No: 5
34775 Ümraniye, İstanbul, TR
Phone : +90 (216) 314 93 20
Fax : +90 (216) 314 93 60
www.aktif.net - info@aktif.net



Germany Office

Bahnhofstrasse 82-86
35390 Giessen, Germany
Phone : +49 176 60940534
www.aktif.net
info.de@aktif.net



HV Factory

Akşemsettin Mah. Atalca Sk. No: 113 06930
Sincan, Ankara, TR
Phone : +90 (312) 269 46 02
Fax : +90 (312) 269 45 01
www.aktif.net - info@aktif.net



LV Factory

Kargalı Hanbaba Organize Sanayi, 2. Sk.,
No: 5, Hendek, Sakarya, TR
Phone : +90 (264) 276 64 50
Fax : +90 (264) 276 64 52
www.aktif.net - info@aktif.net

