



Single Phase Prepaid Electric kWh Meter



General

ADL100 single phase electric meter is designed for single phase active energy measurement on low voltage system, in the same time it can measure the electrical parameters like voltage, current, power and so on. There is also RS485 can be chosen. This power meter has advantages of smaller volume, high precision, good EMC, easily installing etc, All meters meet the related technical requirements of electronic power meter in the IEC62053-21、IEC62053-22 standards.



Model: ADL100-EY
Size: 72*70*88mm
Voltage: AC220V
Current: 10(60)A Direct connect internal relay
Accuracy: class 1.0
Communication: RS485 Modbus-RTU
Remote recharge



Model: ADL100-EYZ
Size: 72*70*88mm
Voltage: AC220V
Current: 10(60)A Direct connect internal relay
Accuracy: class 1.0
Communication: RS485 Modbus-RTU
RF card or Remote recharge



Model: ADL100-EYRF
Size: 72*70*88mm
Voltage: AC220V
Current: 10(60)A Direct connect Out relay
Accuracy: class 1.0
Communication: RS485 Modbus-RTU
RF card

- Rated Current: 10(60)A
- Rated Voltage: AC 220V
- Prepaid mode: Local & Online Topping Up
- 4 Tariff Rates (Spike, Peak, Valley and Flat kWh Unit Price)
- Auto & Remote Switch Control
- RS485 (MODBUS-RTU) Communication
- 8 digits LCD display; kWh Class 1
- Historical records
- DIN 35 mm

Feature

Local&Cloud Prepaid System

- Local Prepaid System
- Cloud Prepaid Platform

Multi-rate Multi-Tariff

- 4 Tariff Rates
- 14 Time Interval by Day



Auto&Remote Switch Control

- Auto Tripping Control (Prepaid)
- Remote Switch Control by System (Postpaid)

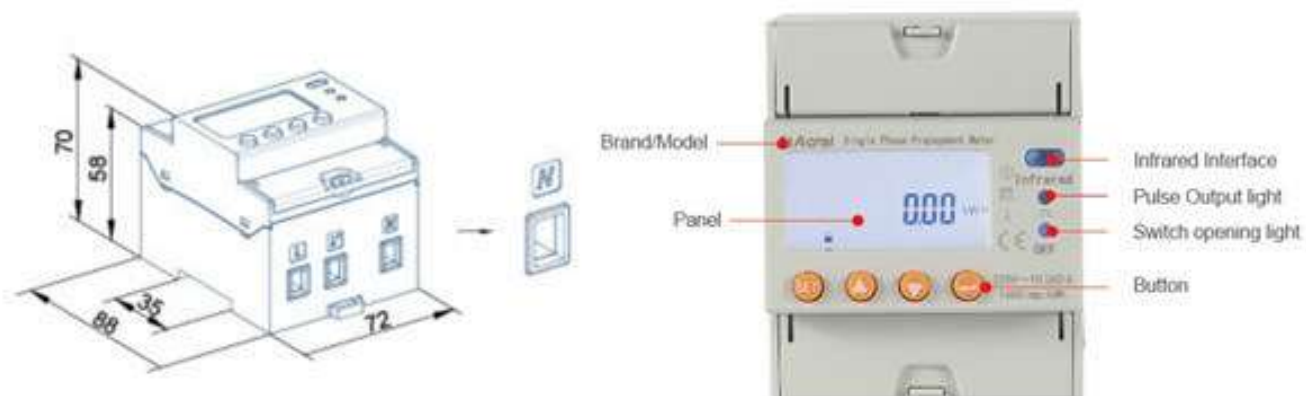
Local&Online Topping Up

- Topping up by RFID Card
- Topping up by Mobile App or System
- Low Balance Alarm by SMS

Specification

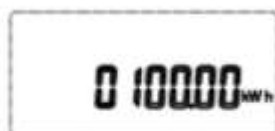
Specification		ADL100-EY	ADL100-EYZ	ADL100-EYRF
Voltage	Reference voltage	AC220V		
	Consumption	< 4VA		
	Accuracy	Class 1.0		
Current	Reference current	10(60)A		
	Accuracy class	Class 1.0		
	Consumption	< 4VA		
Active pulse		Pulse width: 80ms±20ms Pulse constant: 1600imp/kWh		
Display		LCD		
Frequency		50Hz		
Option Function	Communication	RS485, Modbus-RTU compatible protocol		
	Multi tariff energies	4 tariff rates, 14 time interval by day		
Recharge method		Remote recharge	RF card or Remote recharge	RF card
Operation Temperature		-25 °C~+55 °C		
Storage Temperature		-40 °C ~+70 °C		
Altitude		≤ 2000m		
Relative humidity		≤95%RH, no condensation, without corrosive gas		

Dimension

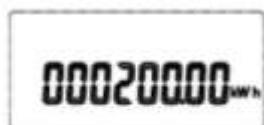


Wiring

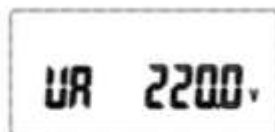
Wiring sample of current and voltage



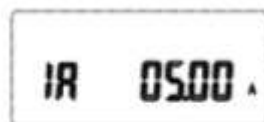
dump energy



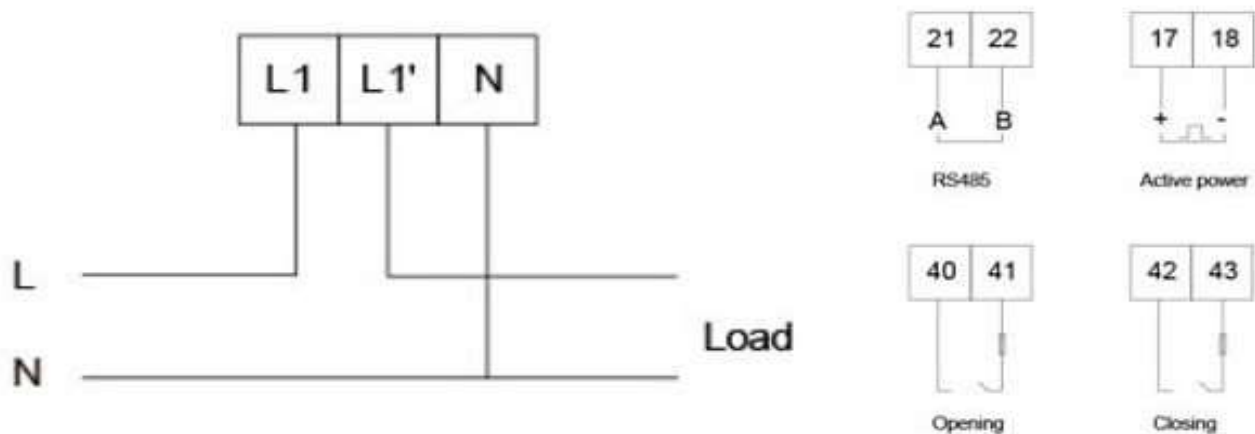
Total Power



Voltage display



Current Display



For single phase meter



Parameter

Current	Reference frequency	50Hz
	Consumption	<4VA(Each phase)
	Input current	10(60)A
	Starting current	0.004 Ib
Measurement performance	Consumption	<4VA
	Accuracy of measuring	Class 1
Clock accuracy		≤0.5s/d
Active pulse	Pulse width	80ms±20ms
	Pulse constant	1600imp/kWh
Communication	Interface	RS485
	Connection mode	Shielded twisted pair conductors
	Protocol	MODBUS-RTU
Dimensions(Length × Width × Height)		72mm×88mm×70mm
Temperature range	Work temperature	-25°C~55°C
	Storage Temperature	-40°C~70°C
Relative humidity		≤95%(No condensation)
Altitude		<2000m

Typical Connection

