aMeter 300
Three Phase Postpaid Meter

Design for AMR and AMI commercial consumers, Providing a strong foundation for your Smart Grid initiatives

Technical Data

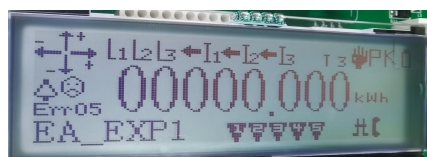| Description	Value
Voltage	
Reference voltage range	231/400 V
Operating voltage range	50% - 120% Un
Current	
Basic current	5A
Maximum current	(80)A
Starting current	<0.4%Ib
Accuracy	Class 1.0
Frequency	
Rated frequency (fn)	50Hz
Frequency range	47.5Hz-52.5Hz
LED Pulse Constant	Default : 800 Imp/kWh - 800 Imp/kVARh Factory Configurable Fixed After Delivery
Temprature	
Normal operation range	-25˚C to +60˚C
Limit operation range	-40˚C to 60˚C
Limit range for storage and transport	-40˚C to 85˚C
Humidity	30%~95%, non-condensing
Power Consumption	
Power consumption in voltage circuit	≤2W
Power consumption in voltage circuit	≤10VA
Insulation Strength	
AC voltage test	4kV
Surge Withstand	6kV
Protection class	IP 54 Class II
Electromagnetic Compability	
Electrostatic discharge	Contact 8kV, air 1kV
Fast transient burst (Main Circuit)	4.4kV
Immunity to Impulse voltage (IEC62052-11)	8kV, The certifictaion was performed at 6kV
External static magnetic field	400mT
Lighting surge	L<->N:4kV
LCD Display	
Digit size	8.0mm x 4.0mm
Number of digit	8
MTBF	≥60.000 Hours
Lifetime	≥10 Years
Dimension	L298,48 X W140,12 X H80,92(mm) (Combo Terminal Cover)

Measurement

- Import, Export and Absolute of active energy
- Instantaneous Voltage, Current, Frequency, power, Reactive power and power factor.
  Active

LCD Display

- Dot Metric LCD display screen with backlight

Display Function

- Cycle display
- 2 Side display
- Up/Down Function display

Tamper Detection & Alarm

- Magnetic tamper detection
- Meter cover open, terminal cover open when power ond off
- Current reverse
- Bypass & Missing neutral
- Current injection on phase
- Current leakage
- Batere Low

Battery

- Super capacitor for at least 48Hours backup power off

Event Record

- Tamper detect (Meter cover open, Terminal cover open, Current reverse, Strong magnetic detect, etc)
- Power quality event (Overload, Power failure, etc)

Optical Interface

- Comply with IEC1107 standard

Security

- DLMS Protocol, High Level Security and Low Level Security function
- Transport security with AES128

Standard Reference

- Comply with IEC 62052-11, 62052-21, 62052-23
- Feature of SPLN D3.006 : 2021 & D3.006-2 : 2021

RTC Synchronization Function

- Auto Synchronize RTC with System data center

Meter Power Supply

- With switching power supply

Relay and Sensor

- 3 Relay 4 Sensor

Memory

- Non-volatile memory with a minimum capacity of 16 MB (for Load Profile, Instant Data, Events, etc.), or can record a load profile of 8832 rows

Active and Harmonic Metering Modes

- Can measure all active energy measurement modes with total harmonic measurement algorithm, 15th order
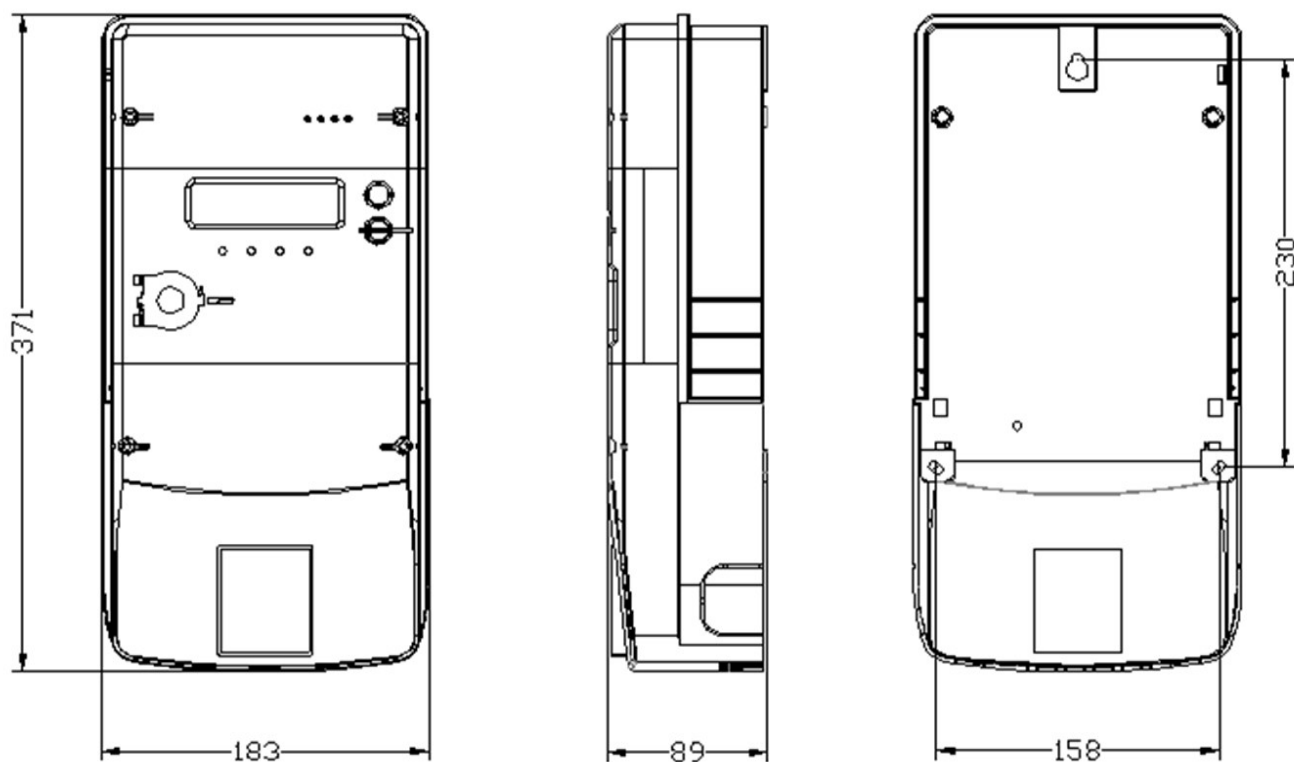
Communication Port

- In the form of a general slot that can be connected to PLC, RF, and Cellular Communication modules in a modular manner (removable) by substitution
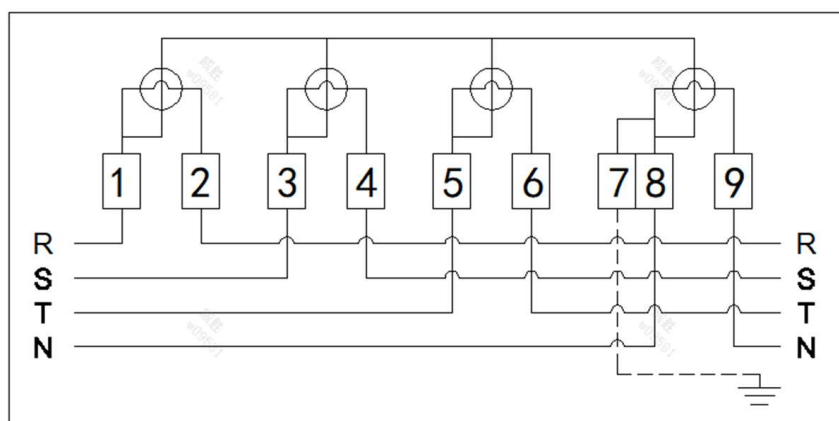
Firmware Upgrade

- has the facility to update the program remotely or over the air

Dimension

Connection Diagram