WASION

Libra-3

ANSI standard Smart Meter

Designed for residential and industrial energy management

Providing flexible solution for your AMI initiatives

Description	Value
Voltage	
Reference voltage	120V to 480V
operating voltage range	80%Un～120%Un
Current	
Basic current	2.5A 15A 30A
Maximum current	Class 20, Class 100,Class 200
Starting current	10mA for Class 20
	50mA for Class 100
	100mA for Class 200
Accuracy	0.2,0.5
Frequency	
Rated frequency (fn)	50Hz/60Hz
Frequency range	±5%
Pulse constant	Default:
	3.6 7.2 0.3 0.6 1.2 1.8 14.4 21.6
Temperature	
Normal Operation range	-25°C to +65°C
Limit operation range	-40°C to +75°C
Limit range for storage and transport	-40°C to +85°C
Humidity	≤95% non-condensing
Power Consumption	
Power consumption in voltage circuit (active)	≤2 W
Power consumption in voltage circuit (apparent)	≤10 VA
Power consumption in current circuit	≤1VA
Insulation Strength	
AC voltage test	4kV
Surge Withstand	6kV
Protection class	Class II
Electromagnetic Compatibility	
Electrostatic discharges	Contact 8kV, air 15kV
Fast transient burst	4kV
Immunity to Impulse voltage	8 kV
Immunity to electromagnetic RF fields	10V/m at reference current, 30V/m without current
Protection degree	IP54, UL50-Type3
Clock accuracy	≤ 0,5 s/day
Lifetime	≧ 10 years

■ Main Functionalities

➤ Measurement energy

- Import/export active energy, reactive energy
- Q1,Q2,Q3,Q4 for reactive energy is optional

➤ Measured Instantaneous Value

- Voltage, current, active, reactive power and power factor

➤ Billing

- Billing data output as standard tables in ANSIC12.19. Including Total and Tier register, Including energy and demand register.

➤ Event

- Up to 300 items logs, Max to 80 differences kinds event, including Standard Event log, Fraud Detection log, Disconnector Control log, Power Quality Event log, Communication log , Security event log and so on.

➤ Load Profile (optional)

- About 2.5Mbytes NVM (FLASH memory) (up to16 different channels)
- The way of working can choose, Circular recording mode or Record full stop mode

➤ Self-read

- Up to 40 blocks of self-read data, Support local, remote and schedule self-read

➤ Time-Of-Use

- Max to 4 tariffs and 4 seasons
- Saturday, Sunday, Working day, Holiday, supported
- DST supported

- Calendars and schedule is programmable. Enables Self Read actions on specified dates -- with or without a Demand Reset

➤ Display

- Display of Energy configurable to 4, 5 or 6 digits
- Energy and instantaneous power are displayed on LCD
- Three display modes:

  Normal, display energy and instantaneous power

  Test, display data for testing the meter

  Alternate, display all measurement items

➤ Firmware upgrading(optional)

- The firmware can be upgraded by OTA.

➤ Demand

- Block or roll demand supported, interval of window is programmable, maximum and cumulative demand, support local, remote and schedule reset.

➤ Prepayment or post-payment (optional)

- The transmission medium is RFID card

➤ Detection and Alarm

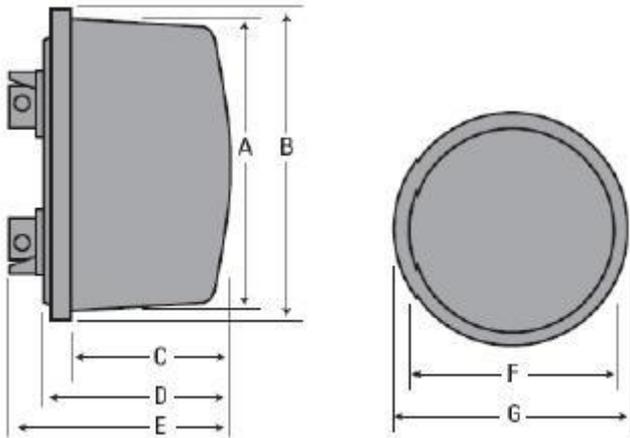- Tamper detection alarm and disconnection, power quality detection and alarm

➤ Relay Control(optional)

- Under voltage / Over voltage or over power limit disconnect and reconnect
- Disconnect or reconnect control by remote system

➤ Communication

- According to ANSI C12.18, C12.19, C12.22, Mod-bus RTU, Option for RS485, RS232, RF, GPRS,/3G/4G, Ethernet communication modules

➢ **Meter Installation Dimensions**

A	B	C	D	E	F	G
6.29"	6.95"	3.93"	4.93"	5.93"	6.29"	6.95"
16cm	17.7cm	10cm	12.54cm	15.08	16cm	17.7cm

➢ **Meter Wiring**

Form	Volts/Services	SC/TR	Class	TA	CA	Kh
1S	120/240/120-480V, 2-wire, 1 element	SC	100/200	15/30	0.5/0.2	3.6
2S	120/240/120-480V, 3-wire, 1.5 element	SC	100/200	15/30	0.5/0.2	7.2
3S	120/240/120-480V, 2-wire, 1 element	TR	20	2.5	0.2	0.3
4S	120/240/120-480V, 3-wire, 1.5 element	TR	20	2.5	0.2	0.6
5S	120/240/120-480V, 3-wire, 2 element	TR	20	2.5	0.2	1.2
9S	120/240/120-480V, 4-wire, 3 element	TR	20	2.5	0.2	1.8
12S	120/240/120-480V, 3-wire, 2 element	SC	100/200	15/30	0.5/0.2	14.4
16S	120/240/120-480V, 4-wire, 3 element	SC	100/200	15/30	0.5/0.2	21.6

➢ **Certificates**