WS74
Single Phase Two Wire Smart Meter

Standards

Item	Standard	Requirement/description
1	IEC62052-11	General requirement and test condition of AC measurement device
2	IEC62053-21	AC static active energy meter (class 1 and 2)
3	IEC62053-23	AC static reactive energy meter (class 2 and 3)
4	IEC62056-21	Local data exchange for meter reading, tariff and load control
5	IEC62056-42	Physical layer for meter reading, tariff and load control
6	IEC62059-41	Electricity metering equipment - Dependability - Part 41: Reliability prediction
7	IEC62056-47	COSEM transport layers for IP networks
8	IEC62056-53	COSEM application layer
9	IEC62056-61	Application layer data exchange chapter 61: OBIS code system
10	IEC62056-46	Data link layer for meter reading, tariff and load control
11	IEC62056-62	Interface classes for meter reading, tariff and load control
12	IEC62053-31	Pulse Output Devices for Electromechnical and Electronic Meters

Information

Type	WS74
Voltage	230V
Frequency	50Hz ± 2%
Current	10(100)A
Accuracy	Active Cl 1.0 Reactive Cl 2.0
Communication Interface	Optical port, GPRS, RF
Starting Current	0.4%Ib
Meter Constant of LED	1000 imp/kWh, 1000 imp/kvarh
Temperature Range	Typical operation: from -25°C to +70°C Storage: from -40°C to +80°C
Typical Power Consumption	Voltage circuit apparent power at Un: Less than 2W/10VA Current circuit apparent power at Ib: Less than 2.5VA
LCD Life Time	More than 15 years
Battery	Replaceable, with more than 15 years' life time
RTC accuracy	Less than ± 0.5 sec/day at 23 ℃; The variation of accuracy with temperature is less than 0.15s/℃/day
Weight of Meter	Approximately 0.8kg
Dimension	246.1mm (L) × 129.5mm (W) × 68mm (H)

Smart Meters Technologies(M) Sdn Bhd

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Function Features

- Active and reactive energy calculation
- Active and reactive demand calculation
- Consumption and cumulate energy register
- Cumulate maximum demand calculation
- Relay control
- TOU, 8 Tarrif with 10 seasons
- Load profile
- Up to 12 months' history energy and demand data

Instantaneous Parameter Measurements

- Voltage
- Current
- Power factor
- Frequency
- Active power
- Reactive power

Backlight

The backlight will be on when pressing button, it's useful to read meter in the dark condition. The time of backlight can be configurable.

LCD Display (with Backlight)

LCD displays up to 7 digits, and the visable size is 56.5mm × 19mm.
LCD supports four display modes:
- AUTO mode
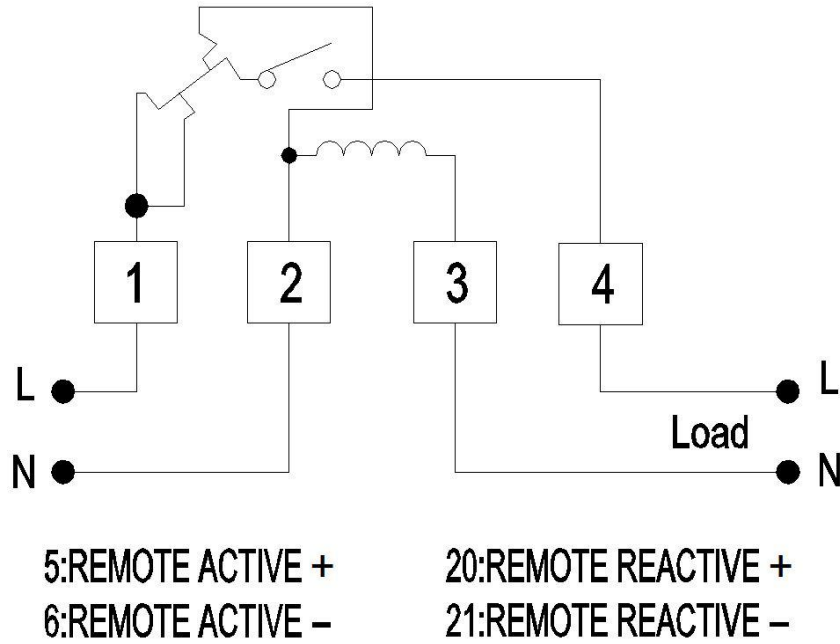- ALT mode
- Test mode
- Power down mode

Event log

- Magnetic detection
- Reverse current detection
- Over current record
- Over and under voltage record
- Meter cover open detection
- Terminal cover open detection
- Power outage detection and etc.

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Connection Diagram

5:REMOTE ACTIVE +   20:REMOTE REACTIVE +
6:REMOTE ACTIVE −   21:REMOTE REACTIVE −

Overall Dimension (mm)