

SINGLE PHASE MULTI TARIFF ELECTRICITY METER

JAM200 Series

- Comprehensive and flexible tariff structure
- Display available without main power
- Maximum demand for each tariff
- Large digital display with backlight
- BS and ANSI (JAM200 A) terminal configuration
- Approval: IEC 62052-11, IEC 62052-21, IEC 62053-21, IEC 62053-23, IEC 62054-21, IEC 62056-61, EN 50470, EN 50470-3



SINGLE PHASE MULTI TARIFF METER

JAM200 Series



Meter Type	Static, Single Phase, Active and Reactive Energy, Bidirectional
Mechanical Compliance	BS Standard (JAM200) / ANSI Standard (JAM200 A)
Connection Type	Single Phase 2 wire
Reference Voltage/Frequency	220 / 230 / 240 V - 50 ~ 60 Hz
Operating Voltage Range	150 ~ 320 V
Over Voltage Operation	Designed to withstand a voltage of 460 V for an indefinite period
Power Consumption	Voltage circuit: $\leq 7.0 \text{ VA} \leq 0.6 \text{ Watt @ 230 V}$
Class Index	Class 1
Basic Current	5 A
Maximum Current	100 A (permanent)
Class Accuracy Current Range	Extended from 100 mA up to 120 A
Starting Current	$\leq 15 \text{ mA}$
Short Time Over Current	3.5 KA for 5 Cycle
Meter Constant	2000 imp/kWh (programmable in test mode)
Degree of Protection	IP54 Insulation Class: Double insulation
Communications	Optical Port: IEC 62056-21 Read/Write Mode C Electrical Port: RS 485 (Option)
Battery	For R.W.P internal long life lithium battery to support RTC and supercap Ability to add external battery easily
Display	Long life 7 digit LCD (from zero to nine) & special annunciators Large digit (8.5 mm x 4.2 mm) viewing angle $\pm 60^\circ$
None-Volatile Memory	Retention time more than 40 years
Real Time Clock Accuracy	$\leq \pm 2 \text{ ppm}$ or $\leq 2.5 \text{ Sec/day @ } 25^\circ\text{C}$
Registers	Up to 4 tariff rates (T1 -T4) and total active energy (antifraud) Export active energy (-kWh) and import reactive energy (+kvarh) Maximum demand for active and reactive energy with time stamp
Historical Registers	24 sets of historical data for billing registers (for 2 years) 24 sets of historical data for active & reactive maximum demand 16 sets of historical data for configuration of meter with operator code
Tariff Structure	4 tariff rates / 8 days for week / 30 exception days / 6 weeks per season / 6 seasons per year
Event Recording	50 sets of power failures with time stamp Number of maximum demand reset with time stamp Number of terminal cover reset with time stamp
Maximum Demand	Adjustable from 1 to 60 minutes
Load Profile	4 channels (P, Q, V, I)
Energy Registration	Measuring absolute value of energy independent of its direction
Terminal Cover Removal	The meter detects terminal cover and main cover removal and records it (JAM200) The meter detects main cover opening and records it (JAM200 A)
Main Cover Opening	For opening the main cover, some part of the case requires breakage
Temperature Range	Operation: -30°C to $+65^\circ\text{C}$ / Limit: -40°C to $+70^\circ\text{C}$ / Storage: -40°C to $+85^\circ\text{C}$
Relative Humidity	100% Non-Condensed
Mean Temperature Coefficient	$\leq 0.01 \%$ @ PF=1 or PF=0.5 ind over -40°C to $+75^\circ\text{C}$
Terminal Material	Brass and Copper
Terminal Block Material	Reinforced polycarbonate, Non-flammable, Recyclable
Terminal Cover and Case Material	Polycarbonate
Weight & Dimension	450 g (173 x 130 x 49) mm (H x L x W) (JAM200) / 600g R=175 mm (JAM200 A)
Wiring Capacity for (100 A)	Main cable must be a min. of 25 mm ² & max. of 35 mm ² (Direct)
Insulation Test	$> 5 \text{ kV}$, 1 min, 50 Hz
Impulse Withstand Test	$> 12 \text{ kV}$ 1.2/50 μsec 500 Ω source
Fast Transient Burst (EFT)	In comply with IEC 61000-4-4 ($\pm 6 \text{ kV}$ on line & null)
Electrostatic Discharge Test (ESD)	In comply with IEC 61 000-4-2 ($\pm 15 \text{ kV}$ air)
Surge Immunity Test	In comply with IEC 61000-4-5 ($\pm 6.6 \text{ kV}$ 1.2/50 μsec 2 Ω source)