

THREE PHASE SMART METER

JAM3000 Series

- Ability to add different communication modules like GPRS, G3 & PRIME PLC
- Includes different log files with various event types; Records 1,000 events
- Flexible event / Alarm management / Fraud detection
- Remote / Local manual Connection & Disconnection
- Ability to communicate with wired or wireless submeters
- Power quality process & Load profile management
- Message / Access authentication & Encryption
- Remote tariff programming
- Remote firmware update
- Support push mechanism



THREE PHASE SMART METER

JAM3000 Series



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| Meter Type | Static, Three Phase , Active and Reactive Energy, Four quadrant | |
| Approvals | IEC 62052-11, IEC 62053-21, IEC 62052-21 IEC 62054-21, IEC 62053-22, IEC 62053-23 | |
| Mechanical Compliance | DIN standard | |
| Connection Type | Three phase four wire | |
| Reference Voltage / Frequency | 3 x 230 /400 V - 50 ~ 60 Hz | |
| Operating Voltage Range | 100 ~ 320 V | |
| Over Voltage Operation | The meter has been designed to withstand a voltage of 500 V | |
| Class Index | Active Class 1/ Reactive Class 2 (Direct) | Active Class 0.5 S / Reactive Class 2 (CT) |
| Basic Current | 5 A (Direct) | 1 A (CT) |
| Maximum Current | 100A (Direct) | 6 A (CT) |
| Class Accuracy Current Range | Extended from 100 mA up to 120 A (Direct) | Extended from 1 mA up to 8 A (CT) |
| Starting Current | ≤15 mA (Direct) | ≤1 mA (CT) |
| Short Time Over Current | 7 KA for 1 line cycle | |
| Meter Constant | 2000 imp/kWh/kvarh (Direct) | 16,000 imp/kWh, kvarh (CT) |
| Insulation Class | Double Insulation | |
| Optical Port | Application layer: COSEM-DLMS / Link Layer: HDLC | |
| Battery | Internal long life lithium battery + supercap for supporting RTC and R.W.P with ability to add external battery easily | |
| Display | Long life 8 digit LCD (from zero to nine) 9mm X 4.5mm LCD with OBIS code 5 digit 6mm X 3mm | |
| None-Volatile Memory | Retention time more than 40 years | |
| Read Without Power (RWP) | Shows meter data on LCD without power | |
| Supported xDLMS Services | Block_Transfer_with_Get, Get, Block_Transfer_With_Set, Set, Selective Access, Multiple_References, Data Notification, Action, General Protection | |
| Communication Module | Fully modular and future proof design communication module totally separated from metrology part | |
| Up Link Communication | Could be GPRS, G3 and PRIME PLC | |
| Sub Meters Communication | Could be wired or wireless MBUS | |
| PLC Protocol Stack | Application model: IEC 62056-61/62 in conjunction with DLMS UA 1000-1 Ed.10.0 Application layer: IEC 62056-53 in conjunction with DLMS UA 1000-2 Ed.7.0 G3 Protocol Stack PRIME Protocol Stack | |
| Operating Temperature Range | -30°C to +65°C | |
| Limit Temperature Range of Operation | -40°C to +70°C | |
| Storage Temperature | -40°C to +85°C | |
| Relative Humidity | Up to 95% for 30 days per year | |
| Mean Temperature Coefficient | ≤ 0.02 % @ PF=1 or PF=0.5 ind over -40°C to +75°C | |
| Degree of Protection | IP54 | |
| Sets of Associations | LLS, HLS (GMAC) | |
| Latching Relay | For demand control and remote or manual connection / disconnection of load | |
| Supported AML use cases | Meter registration Remote tariff programming On demand meter reading Scheduled (Billing) meter reading Remote disconnection & reconnection Power control (e- meters) | Clock synchronization Remote firmware update Alarms and events management Fraud detection Load profile management Power outages, sags & swells process |
| Dimension | 237 / 258 (Short / Long Cover) x 177 x 85 mm (H x L x W) | |