Electronic Afzar Azma

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

Innovation Future Foundation

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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 x DLMS 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 AMI 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 Fruad 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)	