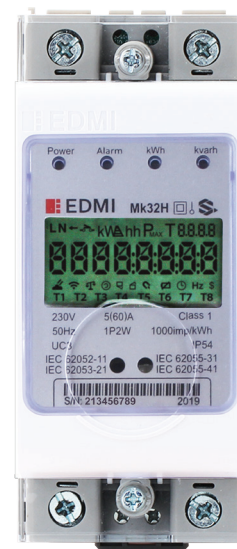## ⚡ ELECTRICITY

Mk32H

ABACUS – Class 1 and Class 2

Advanced Single Phase DIN Rail Meter

Designed for residential use, Mk32H is a DIN Rail single phase meter with integrated 100A UC3 compliant relay. It is able to operate in either STS compliant prepaid mode or post-paid mode. Mk32H can operate with the EDMI CIU (Customer Interface Unit) - HD18 wirelessly as a split meter as well as operate with EDMI gateway – GW30 and the EDMI Head End System – MultiDrive as a complete AMI system.

| Key Features

| STS COMPLIANT | DISCONNECT RELAY | DIN RAIL | ANTI TAMPER | FIRMWARE UPGRADE | RF WIRELESS TRANSCEIVER | NEUTRAL CURRENT MEASUREMENT | SMART READY |

Mk32H

ABACUS - Class 1 and Class 2

Advanced Single Phase DIN Rail Meter

59.41mm (W)

138.95mm (H)

74.35mm (D)

Weight: 0.38kg

Standards and Compliance
- Class 1 and Class 2
- IEC 62052-11, 62053-21, 62053-23, 62055-41

Measurement
- 1 phase 2 wire (optional neutral current measurement)

Voltage
- Nominal voltage: 220V - 240V
- Operating range: 0.5Un to 1.2Un
- Withstand range: 0V to 456V
- Impulse voltage: 6kV

Current
- WC range: 5/60A,10/60A, 5/100A,10/100A
- WC limit: 30 x Imax for 0.5 cycles
- Phase current measurement sensor: Shunt
- Neutral current measurement sensor CT

Terminal
- Terminal cross-section: 63.59mm²

Power Consumption
- Voltage circuit: < 2W, 10VA @ Vn
- Current circuit: <2.5VA @ In

Frequency
- 50Hz/60Hz

Inputs/Outputs Configuration
- Up to 4 x LED indicators
- Up to 2 x outputs

Relay
- Internal disconnect relays (80A or 100A)

Battery
- Internal lithium battery (3.6V)
- Backup time: 5 years without power (lithium battery)

Real-time Clock
- Precision clock accuracy: <5ppm (15 seconds per month) at 23°C

Data Memory
- 2MB of non-volatile memory

Display
- 8 Characters of seven-segment display (7.8mm x 3.8mm) with 4 ID digits (3.3mm)
- Display available without main power
- Option for backlight

Measured Values
- 1 element 4 quadrants
- Import/Export/Absolute Wh, varh and VAh
- Per quadrant: varh
- W, var, VA, Vrms, Irms
- Power factor, frequency

Load Survey/Profile
- Up to 8 channels and 2 independent surveys
- Interval programmable from 1 to 60 minutes
- Energy, instantaneous readings channel sources
- Average/minimum/maximum values for interval duration

Time of Use
- Up to 8 rates plus unified rate
- Up to 8 separate import and export registers
- Daily, weekly, monthly, yearly and special days
- Up to 48 previous billing periods plus billing totals
- Block maximum demand
- Time of maximum demand

Calendar
- Supports Daylight Saving Time

Tamper Detection and Alarms
- Provision for sealing with conventional wire or plastic seals
- Reverse current detection
- Line and neutral current unbalance detection
- Meter cover and terminal cover detection available without main power
- Faulty load relay detection
- Overload detection
- Magnetic tamper detection (optional)
- Alarms are stored in event logs

Security
- Multi-level security (username and password including encrypted log-in)
- Up to 10 independent security levels
- Up to 8 individual users

Operation Mode
- Postpaid/Prepaid

Communications
- Up to 2 independently working communication ports:
  - Optical port: FLAG (IEC 62056-21)
  - RF (260MHz - 930MHz) or RS485 (2-wire)

Protocol
- EDMI command line

Environmental
- Specified operating range: -25°C to +55°C
- Operating range limit: -40°C to +70°C
- Storage range limit: -40°C to +85°C
- Relative humidity: Up to 75% mean, 95% non-condensing for 30 days
- Ingress protection: IP54 (without suction)