





# 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**







DIN RAIL











EUTRAL CURRENT SMART READY

## Mk32H

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### Advanced Single Phase DIN Rail Meter



#### **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)

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