⚡ **ELECTRICITY**

Mk7B

ATLAS – Class 1 and Class 2

Single Phase Smart Meter with Disconnect Feature

Designed for residential and commercial use, the Mk7B can operate in credit or prepayment mode.
It has a 100 Amp relay for remote connect/disconnect of electrical services.

| **Key Features** |

AMI	DISCONNECT RELAY	MEASURE EVERYTHING	ANTI TAMPER	MODULAR COMMUNICATIONS	UPGRADEABLE	P-PAY
AMI READY	DISCONNECT RELAY	MEASURE EVERYTHING	ANTI TAMPER	MODULAR COMMUNICATIONS	UPGRADEABLE	PREPAYMENT

Mk7B

ATLAS - Class 1 and Class 2

Single Phase Smart Meter with Disconnect Feature

130mm (W)

180mm (H)

65mm (D)

Weight: 0.75kg

Standards and Compliance
- Class 1 and Class 2 (MID Class B and Class A)
- IEC 62052-11,62053-21, 62053-23
- AS 62052.11, 62053.21, 62053.23

Measurement
- 1 phase 2 wire

Voltage
- Nominal voltage: 220V – 240V
- Operating range: 176V – 276V
- Withstand: 0 – 288V
- Burden: IEC 62053-61 compliant

Current
- WC range: 5/100A, 10/100A
- WC limit: 7000A for 3 cycles
- Burden: <0.5VA/phase

Frequency
- 45Hz – 65Hz

Relay
- 100A IEC 62055-31 Annex C UC3

Inputs/Outputs Configuration
- Built-in S0 of 27V, 27mA maximum or Relay output of 240V, 2A
- 2 Programmable LED indicators
- Programmable output pulse width: 1ms to 100ms
- Further I/O expansion via PODs

Battery
- Internal battery
- Option for external battery
- Backup time of 10 years without power (Lithium Battery)

Real-time Clock
- Accuracy (internal) within 15 seconds per month at 23°C

Data Memory
- 2.1 MB of non-volatile memory

Display
- Large 7 segment display
- Screen ID is full alphanumeric, 5 digits
- Display digit size: 9.3mm x 4.35mm
- Up to 60 user-defined screens of any meter parameter
- Definable enunciators
- Display available even without main power
- Option for backlight

Measured Values
- 1 element 4 quadrants
- Import/Export/Absolute Wh, varh and VAh
- Fundamental Wh
- W, var, VA, Vrms, Irms
- Power factor, frequency, phasor angles
- Supports ripple control/AFLC

Power Quality Indication
- Total Harmonic Distortion (THD)
- Sag/Swell
  - 5 Cycle resolution
  - Records time/date/phase duration/average and worst excursion
  - Programmable trigger levels

Load Survey/Profile
- Over 7200 days (20 years) storage (2 channels, 30 minute intervals)
- Up to 32 channels and 2 independent surveys
- Intervals programmable from 1 to 60 minutes

- Energy, instantaneous readings, pulsing inputs as channel sources
- Ability to store average/minimum/maximum values for interval duration

Time of Use
- Up to 8 rates plus unified rate
- Up to 32 separate import and export registers
- Daily, weekly, monthly, yearly and special days
- Up to 200 programmable special days
- Up to 61 previous billing periods plus billing totals
- Block or rolling maximum demand
- Time of maximum demand
- Energy, pulsing inputs

Calendar
- Supports Daylight Saving time
- Supports Gregorian or Persian calendars

Tamper Detection and Alarms
- Provision for sealing with conventional wire or plastic seals
- Reverse current detection
- Advanced tamper detection and logging
- Pre-programmed alarms for meter self-check
- Alarms trigger LEDs, enunciators, relay outputs or communications event
- Alarms are stored in event logs
- Option for magnetic tamper detection

Security
- Multi-level security (username and password including encrypted-login)
- Up to 7 independent security levels
- Up to 6 individual users

Prepayment
- Credit or debit operation
- Energy or currency based
- STS token compatible (IEC 62055-31)
- Multiple energy sources
- 8 rates per source
- External debt prepayment x 2
- Minimum charges, standing charges and emergency credit
- Configurable warnings and indicators

Communications
- Up to 2 independently working communication ports:
  - Optical port: FLAG (IEC 62056-21) or ANSI Type 2 (ANSI C12.18)
  - POD-based interface for multiple communication options

Protocol
- EDMI command line
- DLMS

POD System
- Interchangeable PODs for I/O and communications
- Sealable separately
- Multiple communication options available

Software
- EDMI EziView software available for meter programming and reading (Windows® compatible)
- EDMI MultiDrive software available for large scale AMI and AMR solutions (Windows® compatible)
- Supported by many popular third-party multi-vendor AMR systems

Environmental
- Specified operating range: -25°C to +60°C
- Operating range limit: -40°C to +70°C
- Storage range limit: -40°C to +80°C
- Relative humidity: Up to 75% mean, 95% non-condensing for 30 days
- Ingress protection: IP54 (without suction)

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