EDMI

Mk10A
ADVANCED THREE PHASE ELECTRONIC REVENUE METER

Mk10A – Advanced Three Phase Electronic Revenue Meter

The Mk10A is another addition to the Atlas series which enhances the Mk10 meter with additional communications capabilities for use in Power Quality indication, advanced commissioning functionalities and larger memory storage.

HIGH ACCURACY

MEASURE EVERYTHING

TAMPER RESISTANT

LARGE LCD DISPLAY

AMI READY

MULTIPLE COMMUNICATIONS OPTIONS

LARGE DATA STORAGE

FLEXIBILITY

ATLAS SERIES
Class 1 & Class 2

Mk10A

ADVANCED THREE PHASE ELECTRONIC REVENUE METER

The Mk10A is an enhanced version of the Mk10 meter, with Class 1 accuracy and added capabilities in communications, memory and commissioning.

ATLAS SERIES
Class 1 & Class 2

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

VOLTAGE & POWER SUPPLY
- Nominal Voltage: 220V – 240V
- Operating Range: 180V – 290V
- Burden: <10VA/phase @ Vn (3 Phase)
- Frequency Range: 45Hz – 65Hz

CURRENT
- CT Range: 1/6A, 5/20A
- CT Limit: 20 times Imax for 0.5 seconds
- WC Range: 5/100A, 10/100A
- WC Limit: 30 times Imax for 0.5 cycles
            7000A for 3 cycles
- Burden: <0.5VA/phase

MEASURED ENERGY VALUES
- 3 Element 4 Quadrant
- Import/Export Wh, varh and VAh
- Per Quadrant Wh, varh and VAh
- Absolute Wh, varh and VAh
- Phase A,B,C and Total

OTHER MEASURED & DISPLAYED VALUES
- Power: W, var, VA, Vrms, Irms
- Power Factor, Frequency, Phasor Angles

POWER QUALITY INDICATION
- Total Harmonic Distortion (THD)
- Unbalance (Sequence Components)
- Waveform Download

SAG/SWELL
- 5 Cycle Resolution
- Records Time/Date/Phase/Duration/Average & Worst Excursion
- Programmable Trigger Levels

INPUTS/OUTPUTS CONFIGURATION
- Up to 4 I/O Total in 3 Isolated Groups (Maximum 2 Relay Outputs)
- Options Include: Passive/Active Inputs, S0/BOSFET/Relay Outputs
- Passive Input Voltage: 5V, 12V, 48V, 110V, 240V
- Active Input Voltage: 12V
- BOSFET Output: 240V, 100mA maximum
- S0 Output: 27V, 27mA maximum
- Relay Output: 240V, 5A/2A
- 2 LED Indicators, Independent of I/O
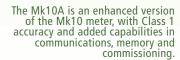- Programmable Output Pulse Width: 1ms to 100ms

ENVIRONMENTAL
- Operating Range: -25°C to +60°C
- Limit Range: -40°C to +70°C
- Storage Range: -40°C to +80°C
- Relative Humidity: Up to 75% mean, 95% non-condensing for 30 days
- Ingress Protection: IP54, UL50 (3R)
- Salt Spray Resistant (IEC 60068-2-11)

LOAD SURVEY/PROFILE
- AMI Ready
- Up to 2.1 Megabytes of Non-Volatile Memory
- Over 3600 Days (10 Years) Storage (2 Channels, 30-Minute Intervals)
- Up to 32 Channels
- Intervals Programmable from 1 to 60 Minutes
- 2 Independent Surveys
- Energy, Instantaneous Readings, Pulsing Inputs as Channel Sources
- Ability to Store Average/Minimum/Maximum Values for Interval Duration

PHYSICAL DIMENSIONS
- Standard Version: Approx. 292.5mm (L) x 175mm (W) x 94mm (D)
- Weight: Approx. 2 kg for WC, Approx. 1.8 kg for CT

TIME CLOCK & CALENDAR
- Accuracy (internal) within 15 Seconds per Month
- Backup Time of 10 Years without Power (Lithium Battery)
- Supports Daylight Saving Time
- Supports Gregorian or Persian Calendars

TIME OF USE
- Up to 8 Rates plus Unified Rate
- Up to 32 Separate Import & Export Registers
- Daily, Weekly, Monthly, Yearly & Special
- Up to 200 programmable Special Days
- Up to 61 Previous Periods plus Period Totals
- Block or Rolling Maximum Demand
- Energy, Pulsing Inputs
- Time of Maximum Demand

LARGE LCD DISPLAY
- Large 7-Segment Display
- Display Digit Size: 10.7mm (H)
- Up to 60 User-Defined Screens of any Meter Parameter
- Definable Enunciators
- Display Available even without Mains Power

SECURITY
- Multi-level Security (Username & Password including Encrypted Log-in)
- Up to 7 Independent Security Levels
- Up to 6 Individual Users

TAMPER DETECTION & ALARMS
- Provision for Sealing with Conventional Wire or Plastic Seals
- Bypassing Current & Reverse Current
- Advanced Tamper Detection and Logging
- Pre-programmed Alarms for Meter Self-check
- Alarms Trigger LEDs, Enunciators, Relay Outputs or Comms Event
- Alarms are Stored in Event Logs

COMMUNICATIONS
- 3 Independently Working Communication Ports
- Optical Port: FLAG (IEC 62056-21) or ANSI Type 2 (ANSI C12.18)
- RS-232 with Modem Power Supply (2G/3G Supported)
- RS-485 Multi-drop (2 or 4 Wire RJ45 or 2 Wire Screw Terminal) or second RS-232
- UDP/IP/PPP/GPRS Capable
- Compatible with Zigbee & MV-90™

BATTERY OPTIONS
- Internal Battery
- Replaceable External Battery

SOFTWARE
- EDMI EziView Software Available for Meter Programming & Reading (Windows Vista/XP/2000)
- EDMI MultiDrive Software Available for Large Scale AMI & AMR Solutions (Windows Vista/XP/2000)
- Supported by Many Popular Third-party Multi-vendor AMR Systems

Icons: HIGH ACCURACY · MEASURE EVERYTHING · FLEXIBILITY · LARGE DATA STORAGE · LARGE LCD DISPLAY · TAMPER RESISTANT · MULTIPLE COMMUNICATIONS OPTIONS · AMI READY

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