

# Mk29

ADVANCED SINGLE PHASE ELECTRONIC REVENUE METER



**Mk29 – Advanced Single Phase Electronic Revenue Meter**  
Built on the Abacus metering platform, the Mk29 is a multi-functional meter with advanced features, like extensive tamper detection, multi-tariff, neutral current measurement and a communication expansion port for RS-485, PLC or Low-Power RF modules. Rated IP56, the Mk29 is suitable for both indoor and outdoor installations. The meter's modular design provides a cost-effective solution for many metering applications.



HIGH ACCURACY



TAMPER RESISTANT



LARGE LCD DISPLAY



AMI READY



MULTIPLE COMMUNICATIONS OPTIONS



FLEXIBILITY

**ABACUS SERIES**  
Class 1 & Class 2

# Mk29

ADVANCED SINGLE PHASE ELECTRONIC REVENUE METER

The Mk29 is an enhanced version of a single phase meter with an optional neutral current measurement feature. It is equipped with communication ports suitable for AMI/AMR applications.

## ABACUS SERIES Class 1 & Class 2



### MEASUREMENT

- Class 1 and Class 2
- Compliance with IEC 62052-11, 62053-21
- 1 Phase 2 Wire

### VOLTAGE & POWER SUPPLY

- Nominal Voltage (Un): 220V – 240V
- Operating Range: 0.7Un – 1.2Un
- Burden: <10VA
- Frequency Range: 50Hz – 60Hz

### CURRENT

- WC Range Ib/Imax: 5/100A
- Short time over current: 30 times Imax for half a cycle
- Burden: <2.5VA

### METER CONSTANT

- 1600imp/kWh, or
- 3200imp/kWh

### MEASURED ENERGY VALUES

- Line only or, Line and Neutral measurement
- Import/Export Wh
- Absolute sum of import/export Wh



### INPUTS/OUTPUTS CONFIGURATION

- Pulsing Output:
  - Pulsing LED for energy
  - Pulsing Output port for energy
- LED Indicators:
  - Export energy
  - Un-balanced load
  - Top cover opened
  - Terminal cover opened
- Push Buttons: 0 or 2 push buttons

### ENVIRONMENTAL

- Operating Temperature: -25°C to +55°C
- Absolute Operating Temperature: -40°C to +70°C
- Storage Temperature: -40°C to +70°C
- Relative Humidity: Up to 95% non-condensing
- Ingress Protection: IP56 (IEC 60528)
- Option for outdoor application



Mk29  
Chinese  
Version



### PHYSICAL DIMENSIONS

- Standard version: approx. 170mm(L) x 122 mm(W) x 55 mm(D)

### LARGE LCD DISPLAY

- Large 7-segment display, 18mm x 7.8mm LCD, 6 digits
- Option for 7 digits, 18mm x 7.8 LCD
- Up to 14 user-defined screens
- Display scrolled without Mains power
- Option for Chinese Character version

### TIME CLOCK AND CALENDAR

- Accuracy (internal) within 15 seconds per month
- Backup time of 3 years without Mains power (Lithium battery)
- Leap year auto-adjust

### TIME OF USE

- Up to 4 rates plus unified rate
- Daily schedule
- Up to 8 daily time slots

### EVENT LOGS

- Date & time of last and number of meter setup
- Date & time of last and number of event log reset
- Starting and ending date & time of the last 10 current-reverse events
- Starting and ending date & time of the last 10 power-off events



### SECURITY

- Multi-level security password protection
- Option for hardware programming protection
- Sealable push button

### TAMPER DETECTION & ALARMS

- Provision for sealing with conventional wire or plastic seals
- Reverse current
- Line and Neutral current un-balanced
- Top cover opened
- Terminal cover opened



### COMMUNICATIONS

- Optical FLAG port (IEC 62056-21), or
- Option for modulated infra-red port (DLT 645)
- Isolated RS-485 Multi-drop (2 wire, screw terminals)
- EDM1 Command-Line protocol, or
- Option for China DLT-645 protocol

### BILLING RESET

- Automatic monthly billing reset
- Manual billing reset with programmable hold-off period
- Storage of 12 billing reset data plus current



### SOFTWARE

- EDM1 EziMeter software available for meter programming and reading (Windows Vista/XP/2000/NT/ME/98)
- EDM1 MultiDrive software available for large scale AMI & AMR solutions (Windows Vista/XP/2000/NT/ME/98)



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