EDMI

Mk6E
Advanced Three Phase Electronic Revenue Meter

Genius Series - Class 0.2S & Class 0.5S

PRODUCT INFORMATION

The Mk6E is an enhanced upgrade of the Mk6 meter, built with a higher class accuracy of 0.2S, catering to the high-end markets. The Mk6E is a high-precision meter created for generation and transmission applications, as well as for revenue metering at high-end consumer facilities.

KEY FEATURES

AMI	HIGH	LARGE	LARGE	MEASURE	UPGRADEABLE	TAMPER	SCRIPT
AMI READY	ACCURACY	DATA STORAGE	LCD DISPLAY	EVERYTHING		PROOF	EXTENSIONS

Mk6E

✳ *Genius Series* - Class 0,2S & Class 0.5S

Advanced Three Phase Electronic Revenue Meter

Accuracy

- Class 0.2S / 0.5S
  (IEC 62053-22, IEC 62052-11)

Voltage

- Nominal - 57 to 240V
  (phase to neutral)
- Burden - <10VA / phase @ Vn (3 phase), as per IEC 62053-61
- Frequency 45-65 Hz

Current

- CT Range - 1/4A and 5/20A
- Short time over-current - 20 times the Imax for 0.5 seconds
- Burden - <0.5VA/phase

Auxiliary Supply Options

- 240V, 110V (other voltages available on special order)

Measurement Modes

- 3 phase 3 wire (2 element)
- 3 phase 4 wire (3 element)

Measured Energy Values

- Import/Export Wh, varh and VAh
- Absolute Wh, varh and VAh
- 4 quadrant Wh, varh and VAh
- Phase A, B, C or Total

Other Measured and Displayed Values

- Power: W, var, VA
- True RMS Voltage (3 phase)
- True RMS Current (3 phase)
- Power factor
- Frequency
- Phasor angles

Quality of Supply Features

- THD
- Unbalance
- Fundamental Voltage, Current and Watt measurement
- Harmonics (up to the 50th)
- Sag / Swell
- 5 cycle resolution
- Records time/date/phase/duration /worst excursion
- Programmable trigger levels

Pulsing IO

- 2 inputs + common ground
- 2 outputs + common ground
- 6 outputs + common ground
- 110/240V BOSFET outputs (IEC 62053-31 class A and B)
- Up to 16 inputs or outputs via optional extended IO cards

Communications Ports

- Local - ANSI type 2 optical or FLAGTM (IEC 61107)
- Remote - Isolated RS485, RS232 or both

Communications Features

- ANSI Type 2 Optical
- IEC 61107 / IEC 62056-21 + VDEW 2.0 extensions
- RS232 (RTS/CTS and DTR/DCD)
- RS485 (2 or 4 wire multidrop)
- SCADA
- Modems (PSTN/GPRS/GSM/CDMA)
- MV90TM
- MODBUS®
- UDP/IP over PPP/GPRS
- DNP3 level 2
- IEC 870-5-102
- Optional internal modem power supply

Temperature Range

- Operating -25 to +60℃
- Storage -25 to +80℃

Humidity range

- 0 to 95% non condensing

Time Keeping

- Accuracy: 0.5s/day (over full temperature range)
- Backup time - 2 years without power
- Backup type - optional lithium battery 700/1200mAh, 3.6V and SuperCap (single/dual)
- Battery shelf life of 20 plus years
- Mains synchronised or internal crystal time keeping. Mains synchronised reverts to internal crystal on loss of all phase volts

Time Of Use

- 8 rates plus unified rate
- Up to 12 separate import and export registers
- Up to 200 programmable special days
- Daily, Weekly, Monthly, Yearly, Special
- 13 or more previous periods
- Block or Rolling Maximum Demand
- Time of Maximum Demand

Load Survey / Profile

- NEM compliant
- Over 900 kilobytes of flash data storage space.
- ~ 3100 day-channel capacity at 30 minute intervals
- ~ 1875 day capacity at 30 minute intervals / 2 channels
- ~ 520 day capacity at 15 minute intervals / 3 channels
- Up to 50 channels
- Interval programmable from 1 second to 1 month
- Multiple independent surveys
- Energy, instantaneous readings, pulsing inputs, average/min /max readings

LCD Display

- 16 character by 2 line alphanumeric display
- Programmable units, multipliers and leading zeros
- Up to 64 user definable screen displays
- Displays any available meter parameter
- Optional 20 character by 4 line alphanumeric display

Extensions for Customer Applications: standard or to order

Mk6E GENIUS plus®meter continues the successful concept of meter "Extensions" introduced in the original Mk6 Genius® Using "EziScript", complex register manipulations can be performed allowing sophisticated meter functions. New Extensions are constantly under development, contact us to find out the latest updates.

Some examples of currently available Extensions are:

- Send SMS at percentage of maximum demand, or equipment failure alarm
- Maximum demand control of loads via pulsing outputs
- Time Of Use history etc

Software

- EziView Windows® software (optional), can be used for programming and reading the meter
- EziView also allows offline configuration of tariff programs and all meter parameters, for later upload

Dimensions

- 262mm (L) 175 mm (W) 93mm (D)

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