



# Mk11

High-Precision Power Quality  
Electronic Revenue Meter

“Taking the Genius meter series to the next level”

# Introduction

Mk11  
Product Launch

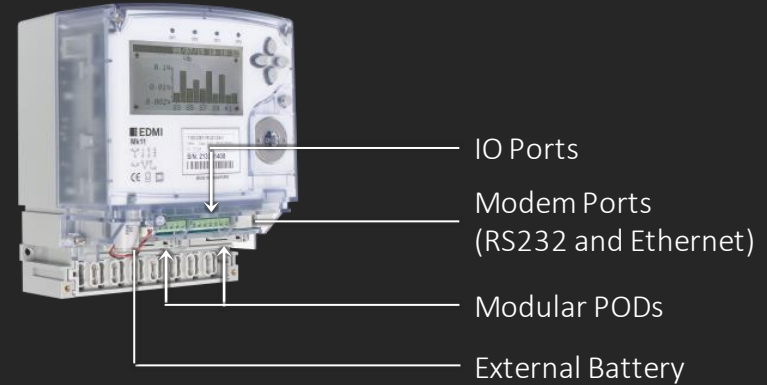
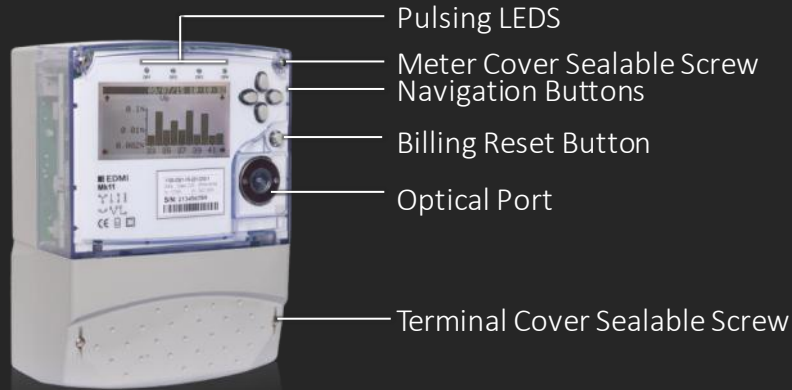
The Genius Mk11 is a high-precision power quality electronic revenue meter, designed for generation, transmission and large industrial users. Surpassing the class 0.2S requirement, it offers the highest level of metering system accuracy, with full power quality features.

The Mk11 is based on the Genius series platform which has more than 18 years of experience in the 3-Phase HVCT industry.

With improved revenue accuracy, additional power quality measurements, faster processor and larger memory capacity, while retaining it's legacy as an advanced electronic revenue meter, the Mk11 has indeed reached new heights to provide better quality, features and applications for customers.

# Introduction

Mk 11  
Product Launch



Front View



Rear View



Top View



Front View  
(No Terminal Cover)



Bottom View  
(No Terminal Cover)

## High Precision Electronic Revenue Meter

Surpasses the IEC62053-22 Class 0.2S standards (average accuracy of 0.05%)

## EN 50160 Power Quality Reporting

A power quality report provides EN 50160 compliance statistics and reports with IEC 61000-4-30 Class A accuracy

## Power Quality Analysis\*

Power Quality Features according to IEC 61000-4-30 that include as harmonics and inter-harmonics, supply voltage sag/swells, voltage interruptions, flicker, transient voltages, unbalance supply voltage, etc.

## Larger Memory Space and Faster Processor

64MB to 2GB of non-volatile memory for long-term storage (27,000 days – 4 channel, 30min interval) and more scripting capability with 50x more MIPS

## Ethernet Communication

Built-in 10/100 Mbps port



\* Under Development – refer to roadmap

## Faster waveform sampling rate of 512 samples/cycle

Denser data collection points of 512 samples per frequency cycle

## Graphical LCD

The 160 x 80 pixels, greyscale LCD with backlight is capable of displaying graphs, tables, waveforms and vector diagrams.

## Navigation buttons

4x buttons for easy navigation on the LCD

## Standard Genius feature/functions still available

Supports scripting and legacy features of the Genius Series

## Flexible with multiple protocols\*

EDMI Command Line, DLMS/COSEM, Modbus, DNP3.0, DL/T 645-2007, etc

## Communication\*

Modular communications

\* Under Development – refer to roadmap



# Positioning

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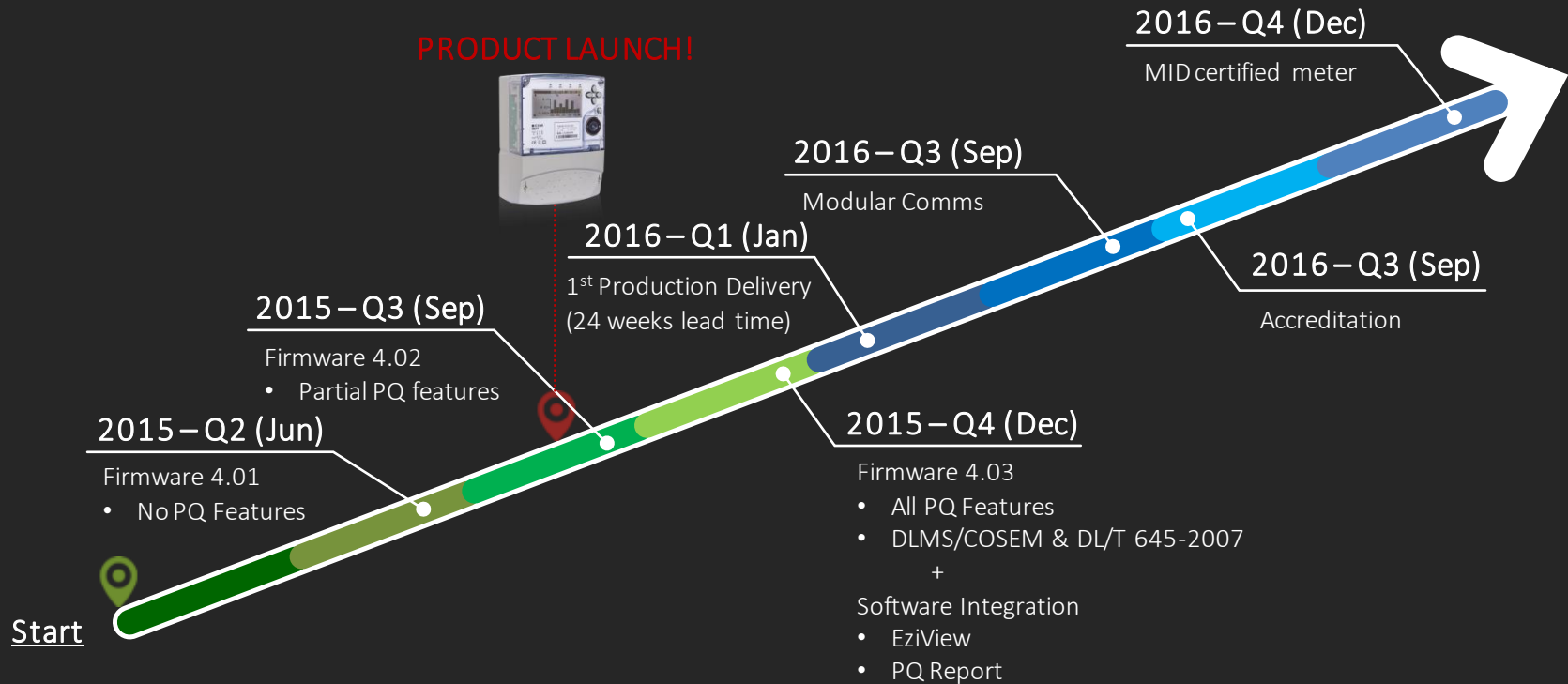
Mk11 is for generation, transmission and large industrial customers who require a high performance electronic revenue meter that enables them to have precise accuracy measurements, power quality features, faster processor, larger memory, ethernet communications and the Genius series platform legacy features.

Target Customer: Generation, Transmission and Large Industrial Customers



# Roadmap

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Product Launch



# What's Available

Mk 11  
Product Launch

## To Order

Only 1 configuration available (11200-23H1-1R-321-C6-0)

Current Range – 5(20)A

Voltage Range – 57V to 240V (+/- 20%)

Remote Comms – RS232 + Ethernet (UDP only)

I/O Option – 4xPassive Inputs + 6xSO Outputs

LCD – with Backlight

Neutral Current Option – Fitted

Auxiliary Power Option – AC/DC Auxiliary Change-Over, Auxiliary Priority



# Competitors

Mk 11  
Product Launch



Model: EM720  
Est Price: unknown



Model: ION8800  
Est Price: \$3500  
Qty: 1



Model: PQMII  
Est Price: \$2100 USD  
Qty: 1



Model: Nexus 1500  
Est Price: \$5500 USD  
Qty: 1



Model: SEL-735  
Est Price: \$1500 USD  
Qty: 1

# Meter Series Comparison

Mk11  
Product Launch

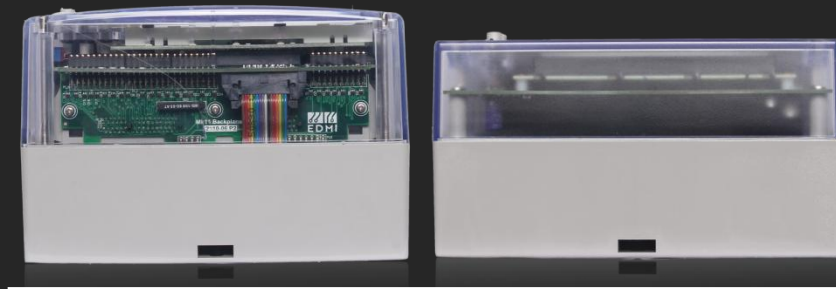
## Mk11



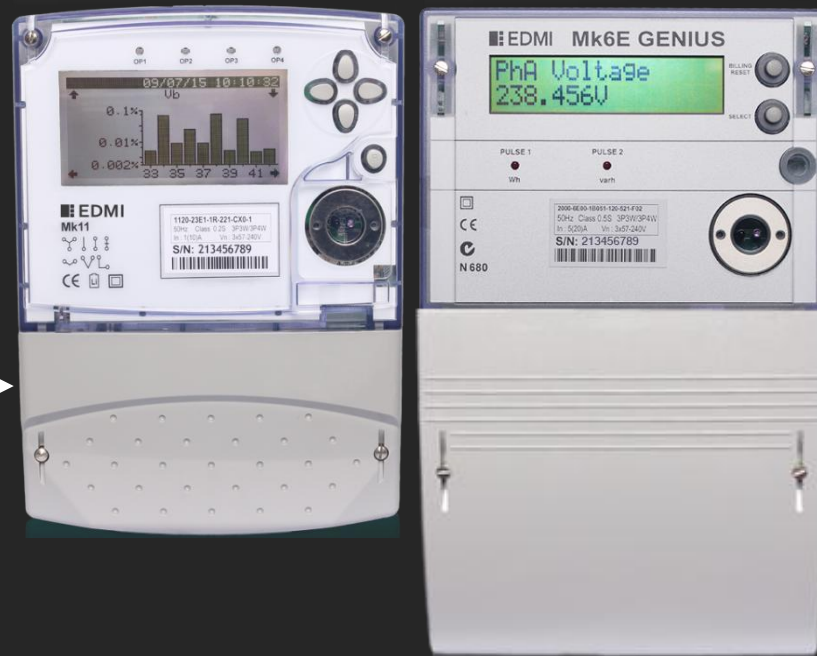
## Mk6E



# Actual Size Comparison



Top View



Front View

Mk11 standard  
terminal cover →

← Mk6E standard  
terminal cover

# Meter Series Comparison

Mk11  
Product Launch

Features	Mk11	Mk6E
		
Accuracy	Class 0.1 / Class 0.2S / 0.5S	Class 0.2S / 0.5S
Physical Dimensions	250mm (H) x 175mm (W) x 120mm (D) Weight: 2.56kg	290mm (H) x 175mm (W) x 95mm (D) Weight: 2.0kg
Mounting Hole Position	170mm (top-bottom), 79mm (centre-side) Fit Mk6E mounting. <i>*Refer to hardware manual</i>	169.79mm (top-bottom), 79.25mm (centre-side) <i>*Refer to hardware manual</i>
Power Quality	Power Quality Features according to IEC 61000-4-30	Power Quality Indication
Waveform Sampling Rate	512 samples/cycle	101 samples / 5 cycles
Protocol	EDMI Command Line, DLMS/COSEM, Modbus, DNP3.0, DL/T 645-2007, etc.	EDMI Command Line, DLMS/COSEM, Modbus, DNP3.0, DL/T 645-2007, etc.

# Meter Series Comparison

Mk11  
Product Launch

Features	Mk11	Mk6E
LCD	17 alphanumeric digits, 2 lines, able to display waveforms, graph, tables, vector diagrams.	16 alphanumeric digits, 2 lines
Connection Type	CT only	CT only
Auxiliary Supply	Auxiliary priority only	Auxiliary priority / VT priority
Measurement Element	3P3W and 3P4W	3P3W and 3P4W
Neutral Current Measurement	Fitted	-
Magnetic Tamper Detection	4x reed switch (high sensitivity)	Low sensitivity magnetic sensor
Communication Type	Modular (2x Mk11 PODs)	Modular (under terminal cover)
IO Ports	4x passive inputs, 6x S0 outputs, 4 LEDs	4x passive inputs, 10x BOSFET outputs, 2x LEDs
Faster Processor	208MHz	25MHz
Data Memory	64MB	1MB + 512kB
Standards	IEC62052-11, IEC62053-22, IEC62053-23, AS/NZS 60950.1	IEC62052-11, IEC62053-22, IEC62053-23, CLC/TR 50579
Test House Accreditation	UL	UL (NMI-M6 certified), NMI (MID certified)



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