

**The emlite modular meter range provides total flexibility for smart metering deployments. The modular capabilities allow the meter to be expanded with functional and communications modules either at manufacture or after installation**

### Features -

#### Meter

- Fully MID approved
- Measures Import and Export, Active and Reactive Energy
- Power Quality Information - Volts, Current, Power etc.



The emlite modular metering system has been designed to meet the many challenges of AMR and Smart Metering deployments. Through the versatility of modularity, the emlite system caters for 'hot swappable' communication and functionality upgrades without the need to switch-off, remove or replace the MID approved metering device from the installation.

Emlite modular meters are available in several variants that suit a wide range of tariff options, including:

- **EMA1 - Standard Residential, available with and without disconnect breaker**
- **EMB1 - Residential with integral 100 Amp load control breaker**
- **EMC1 - Twin Element meter for measurement of two circuits, (residential & heating), integral 100A load control breaker**

Meters may be installed as part of a 'Smart Ready' deployment and have the internal capability to function as standard utility metering until upgraded with an appropriate module. Base meter functionality is dependent on variant; however, all models include the following as a minimum:

- Physical disconnect breaker
- 4 quadrant energy measurement
- 50 time of use rate registers (per quadrant) with day-of-week and seasonal time-of-use switching capabilities.
- Anti-tamper features - magnetic fraud detection, terminal cover removal detection, neutral disconnect fraud prevention
- Power quality recording - voltage sags and swells, instantaneous and average voltage, current, power factor etc.

Modules connect to the top of the meter using the integral data and 230V supply ports.

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# Modular Electricity Metering for Smart and Advanced Metering

## Twin Element Metering

The Twin Element meter variant features two metering circuits for the independent measuring of residential and heating loads. The heating load is controlled through a 100A rated breaker activated by an independent time-of-use switching matrix. The switching matrix again allows for day-of-week and seasonal switching with 50 time-of-use rates available.

A Boost facility may be operated allowing the user to switch in the heating circuit when desired for additional heating charge. When required the boost facility is enabled through the meters normal display cycle.

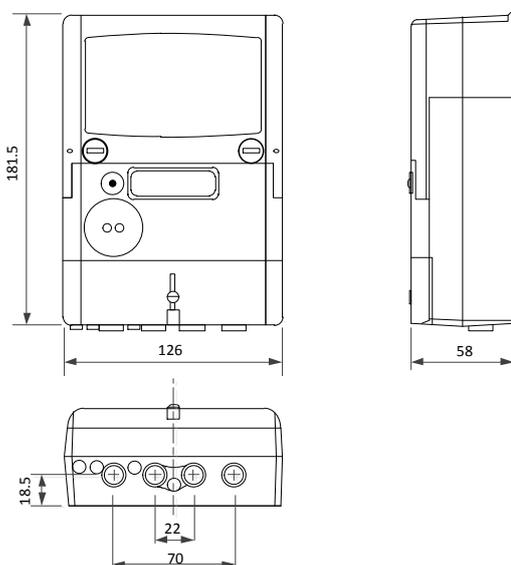


## Technical Data - Meter

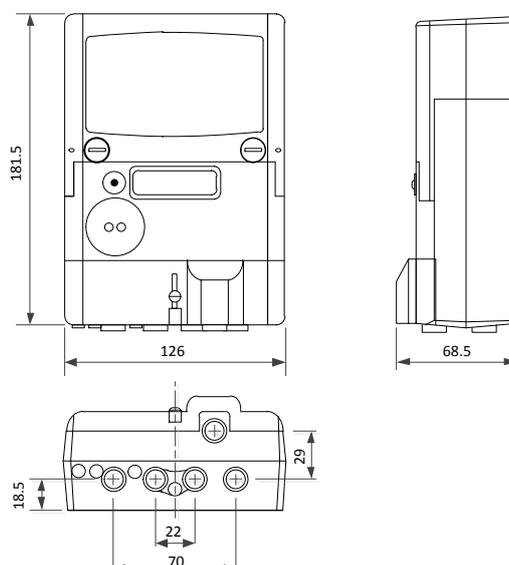
<b>Electrical</b>	Voltage	Nominal voltage	220V–240V, 276V max
		Voltage withstand	415V continuously
	Frequency	Nominal frequency	50Hz, variation $\pm 5\%$
	Current	Basic current ( $I_{ref}$ )	5, 10, 15 and 20A
		Maximum ( $I_{max}$ )	100A
<b>Metrology</b>	Accuracy	Active energy	Class B, to EN 50470 1-3
		Reactive energy	Class 2, to IEC 62053–23
<b>Environmental</b>		Temperature Range	-25°C to +55°C
		Ingress protection	IP52, to BS EN 60529
<b>Physical</b>		Terminal arrangement	BS 7856
		Main Terminal size	8.2 mm diameter
		Terminal Construction	Solid brass

## Dimensions

### EMA1



### EMB1/EMC1 (100A load control)



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