

SMO

Electronic Single-Phase Electricity Meter

Key Features

- ▶ Compact and lightweight sealed-for-life design
- ▶ Long-life electromechanical drum-register
- ▶ Reduced environmental burden
- ▶ Fraud protection
- ▶ 20-year certification in the UK

The Actaris SMO is an extremely compact sealed-for-life electronic credit meter for single-phase residential applications, and is the latest in a long and successful line of residential metering products from Actaris Metering Systems.

Cost Effective Revenue Metering

Specifically designed to provide cost-effective, entry level functionality for customer revenue metering, the SMO combines modern metering technology with a well-proven electromechanical drum-register, to deliver outstanding performance over a long life.

Long-Life

The SMO is manufactured in the UK to the highest standards of quality, reliability and accuracy, and has been designed for a 20-year certification life, which means zero refurbishment costs over the life of

the product. At the end of life, the SMO also has the additional advantage of a reduced environmental burden, when compared to LCD-type meters.

Compact and Lightweight

Designed with a significantly reduced footprint when compared to more traditional metering equipment, the SMO is simple to install and can serve to minimise storage and transportation costs, a factor which is becoming an increasingly important consideration in today's competitive marketplace.

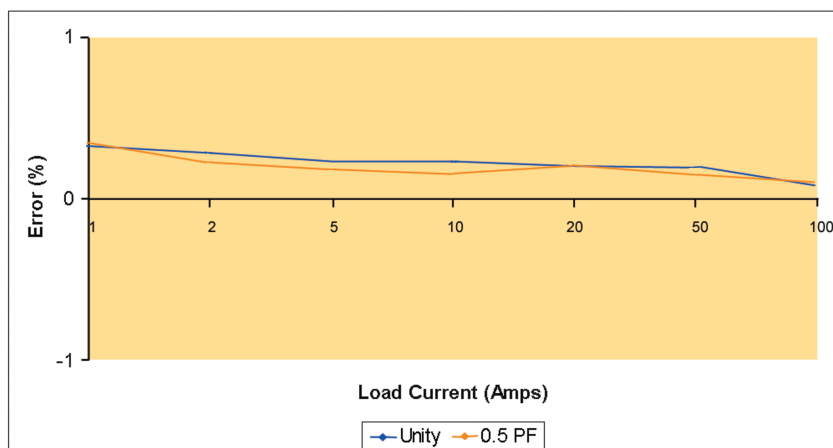
Simple, Easy-to-Read Register

The SMO is fitted with a traditional electromechanical drum-register, which offers superior readability and reliability when compared to electronic displays, and offers the additional advantage of allowing the meter to be read when de-energised.

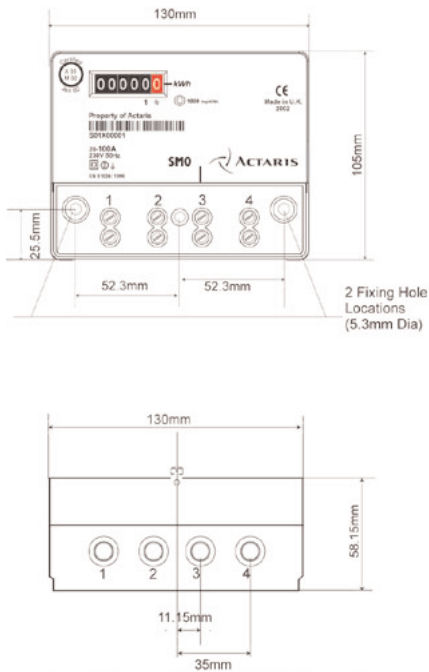


▶ SMO meter

Typical Performance Curves



Dimensions



Terminal Identification

- | | |
|-----------------|------------------|
| 1. Live (in) | 3. Neutral (out) |
| 2. Neutral (in) | 4. Live (out) |

The mains supply and load should be connected to the meter as shown in the connection diagram which can be found inside the meter terminal cover.

NOTE: The installation of the SMO meter should be carried out by a qualified electrician and in accordance with any current wiring regulations which are applicable.

Technical Specifications

Parameter	Characteristics
Meter Type	Electronic single phase watt-hour meter
Approval	EN61036: 1996 (indoor meter)
Measuring scope	Active energy
Class Index	Class 1 or Class 2
Register	Single rate drum-register with 5+1 digit (10Wh) resolution
Network	1 phase 2 wire
Reference voltage/frequency	230V/50Hz
Operating voltage range	-20% to +15%
Power consumption	0.2VA @ 20A 0.8W 8VA max. @ 230V
Basic current	20(A)
Maximum current	100(A)
Starting current	0.4% I _b for Class 1 (EN61036: 1996)
Meter constant	1000 imp / kWh
Indicators	Forward energy indicated by red LED (modulated at 8kHz) Reverse energy indicated by green LED
Operating temperature range	-10 deg C to +45 deg C
Limit temperature range of operation	-20 deg C to +55 deg C
Limit transportation range for storage and transport	-25 deg C to +70 deg C (storage and transport of the meter should only be at the extremes of this temperature range for a max. period of 6 hours)
Degree of protection (BS EN60529)	IP51
Terminal material	Brass
Terminal arrangement	BS 7856
Wiring capacities	Main cables must be a minimum of 25sq.mm and up to a maximum of 35sq.mm (copper)
Material	Meter case, base and terminal cover - recyclable polycarbonate
Terminal cover seal	Bowden seal
Meter weight	0.4kg

CE The SMO complies with Council Directive 89/336/EEC on Electromagnetic Compatibility as amended by Council Directive 91/31/EEC (Statutory Instrument 1992 No. 2372 Electromagnetic Compatibility).

Manufactured under a quality system approved to ISO9001