

# ACE1000 SMO

## Electronic Single-Phase Electricity Meter

- ▶ Compact and lightweight sealed-for-life design
- ▶ Long-life electromechanical drum-register
- ▶ Reduced environmental burden
- ▶ 20-year certification in the UK
- ▶ Pulse output available
- ▶ BS terminal configuration

The Actaris ACE1000 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 ACE1000 SMO combines modern metering technology with a well-proven electromechanical drum-register, to deliver outstanding performance over a long life.

### Long-Life

The ACE1000 SMO is assembled 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 ACE1000 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 ACE1000 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.

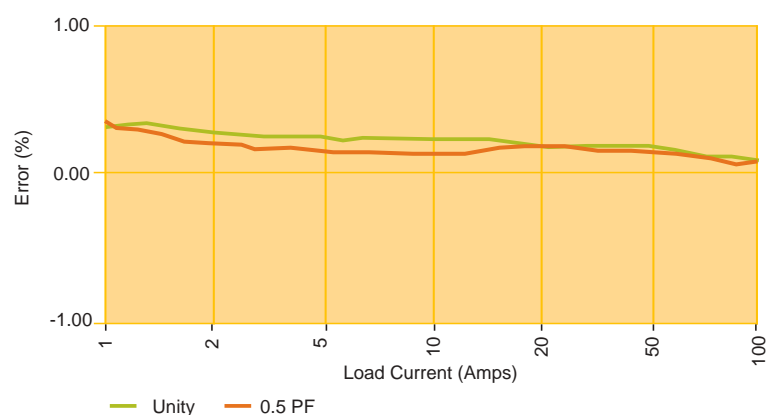
### Simple, Easy-to-Read Register

The ACE1000 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 power is absent.

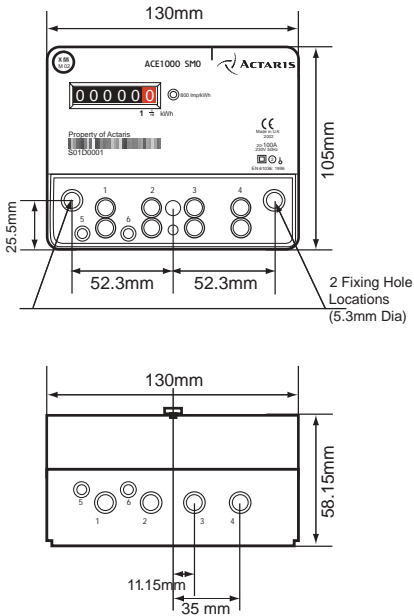


▶ ACE1000 SMO

### Typical Performance Curves



## Dimensions



### Terminal Identification

- |                  |               |
|------------------|---------------|
| 1. Live (in)     | 4. Live (out) |
| 2. Neutral (in)  | 5. Aux 1 (-)  |
| 3. Neutral (out) | 6. Aux 2 (+)  |

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 ACE1000 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) including Amendment 1
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 <sub>b</sub> for Class 1 (EN61036: 1996)
Meter constant	800 imp / kWh
Indicators	Forward energy indicated by red LED (un-modulated) Reverse energy indicated by green LED
Pulse output (option)	800 pulses/kWh (Aux1/Aux2) Compliant with EN 62053-31 Class A specifications
Operating temperature range	-10°C to +45°C
Limit temperature range of operation	-20°C to +55°C
Limit transportation range for storage and transport	-25°C to +70°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 (EN60529)	IP51
Terminal material	Brass
Terminal arrangement	BS 7856
Wiring capacities	Main cables must be a minimum of 25mm <sup>2</sup> and up to a maximum of 35mm <sup>2</sup> (copper)
Material	Meter case, base and terminal cover - recyclable polycarbonate
Terminal cover seal	Bowden seal
Meter weight	0.5kg
Dimensions (L x W x D)	105mm x 130mm x 58.15mm

CE The ACE1000 SMO complies with Council Directive 89/336/EEC on Electromagnetic Compatibility as amended by Council Directive 92/31/EEC and 93/68/EEC  
Manufactured under a quality system approved to ISO9001