



# ACE SL7000

## Commercial & Industrial Electricity Meter

ACE SL7000 meters support the new needs arising from deregulation and competition in the electricity market as well as classic metering.

### Smart

Compliant with IEC standards, these meters include large innovative capabilities. They allow multiple recording of load profiles along with local and remote communication on several lines.

### Flexible

Designed for direct or transformer connection, ACE SL7000 meters employ a scalable architecture that makes them equally suitable for use with existing and new electricity distribution networks.

### Wide Range of Applications

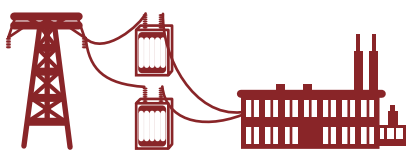
Thanks to an auto-ranging power supply and extremely wide measuring range,

a single meter type can be used across a variety of applications – from large commercial installations to substation metering.

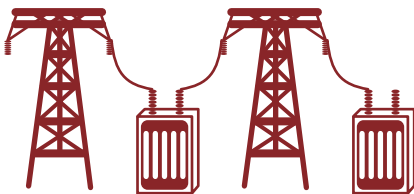
▶ Commercial and Industrial Applications  
Summation features and multi-energy inputs reduce the need for additional data concentrators. Separate communication lines for the utility and customer provide a closer link and added value to the electricity provider.

▶ Substation Applications  
Accuracy and linearity ensure high quality billing data. Instantaneous values for a variety of quantities serve as a base for network monitoring. In addition, simultaneous communication channels allow different departments to use the installation.





▶ Commercial & Industrial applications



▶ Substation applications

## Adding value

Through the application of the latest-generation metrological and communications technology, ACE SL7000 meters bring significant benefits to utilities and end-users alike, adding value to every aspect of the metering process.

### Utility Benefits

#### ▶ Reduced Inventory Cost

Thanks to a wide measuring range and auto-ranging power supply, industrial and commercial users need only one type of meter for many types of installations.

#### ▶ Reduced Data Collection Cost

Read cycles are kept to a minimum by internal storage of all billing data, and powerful communications capabilities permit low-cost remote meter reading. Conformance with the latest IEC communications standards ensures that the meters can be easily integrated into standard data collection systems.

#### ▶ Reduced Non-Technical Losses

Multiple safety features guard against technical problems being introduced by human intervention.

#### ▶ Network Monitoring

Our meters permit monitoring of the actual network condition, including logging of anomalies as single events or in a continuous file. This can be used to prevent and repair faulty network conditions.

#### ▶ Feature Upgrades

ACE SL7000 meters include an upgrade engine to further enhance functionality. Upgrade costs can be kept to a minimum through the re-use of existing equipment.

#### ▶ Withstand Adverse Environments

Our meters are designed and tested to cope with severe environmental conditions, such as electromagnetic disturbances and network condition variations.

### End-User Benefits

#### ▶ Consumption Monitoring

The meters provide information that is readable online through a dedicated communications port so end-users can monitor and control energy consumption.

#### ▶ Supply Monitoring

Voltage quality parameters can be defined and the supply monitored. This data can be used for verification purposes when quality is a contract parameter.

#### ▶ Excess Consumption Feature

ACE SL7000 meters can monitor consumption against configurable thresholds and can activate contacts if consumption exceeds limits.

## Key Features

### Multi-Energy

- Internal measurement of active, reactive and apparent power in each direction, and separately per phase.
- Four pulse inputs provide additional metering information (versions with I/O lines).

### Load Profiles

Can store up to eight channels of load profile for various base quantities.

### Multi-Rate

- Multi-rate billing for energy and demand.
- Ten base quantities can be submitted to billing.
- 32 energy-rate registers and 24 demand-rate registers are available.
- Rate switching mainly performed by internal clock, but can be influenced externally (versions with I/O lines).

### Voltage Quality

- Process voltage threshold levels to perform in-depth analysis of supply voltage fluctuations.

### Communications

- Up to three communication channels depending upon the version of meter.
- Two channels can be used simultaneously.
- Local- and remote-reading ports.
- External telephone modem can be supplied from the meter.
- DLMS-Cosem conform.



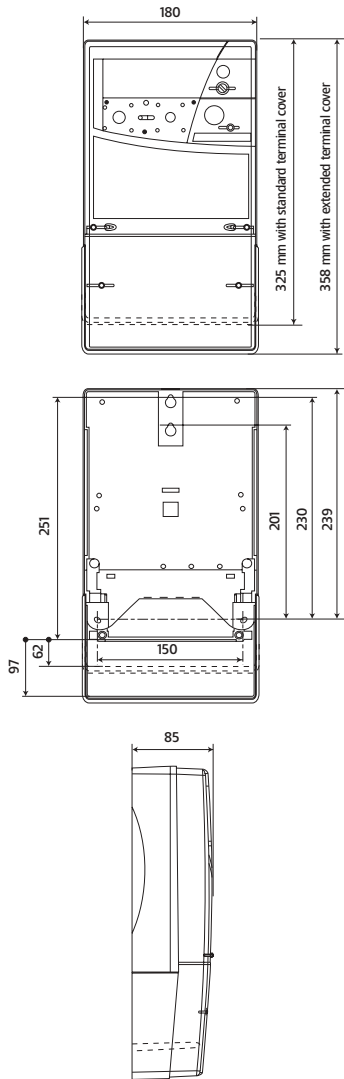
## ACE SL7000 Meter series

- ▶ Basic version without electrical I/O lines
- ▶ Intermediate version with limited set of I/O lines
- ▶ Flexible version with extended I/O capabilities

In all versions, several configurations are available



## Dimensions



## Technical Data

Ratings	Voltage:	3*57.7/100V up to 3*240/415V auto ranging
	Direct current:	In 5A, I <sub>max</sub> 120A
	Ct/connection:	I <sub>b</sub> 1A, I <sub>max</sub> 10A
Network types	Direct connection:	4-wire meter, fully operational in 3-wire connection without neutral
	C/t, v/t connection:	3- and 4-wire configurable connections
Accuracy	Direct connected:	Class 1 (IEC 61036)
	Transformer connected:	Class 0.2s up to Class 0.5s (IEC 60687) Class 0.5s (IEC 60687) & Class 1 (IEC 61036)
	Reactive energy:	Class 1 or Class 2 (IEC 1268)
Frequency	50 / 60 Hz	
Temperature range	-40°C to +70°C	
Standards	Full compliance with IEC 61036, IEC 60687 and CE marking standards (mechanical, climatic, electrical, electromechanical, metrological)	
Communications	IR-port (IEC 61107), optional RS232C and/or RS485 DLMS-Cosem Protocol (IEC 62056)	

## Accessories

Communications	External telephone modem
	Cabling for external communications devices
	IR-reading device for connection to PC
Configuration/Calibration	Customer software for consumption monitoring
	Utility software for configuration
	Utility software for calibration
Installation tools	Transformer ratio labels
	Sealing kit
Documentation	Test certificate
	User guide
	Installation manual