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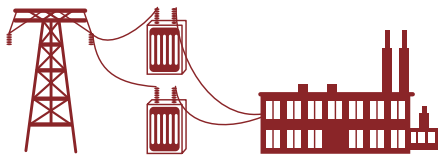
» Substation Applications
Accuracy and linearity ensure high quality billing data. Instantaneous values for a variety of quantities serve as a base for network monitoring. In addition, simultaneous communication channels allow different departments to use the installation.
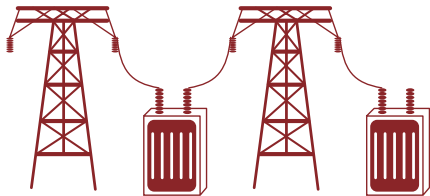
knowledge to **shape your future**

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

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

» IInternal 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 16 channels for various base quantities into two independent profiles.

Multi-Rate

» Multi-rate billing for energy and demand.
» 10 Basic 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 (PSTN / GSM / GPRS / LAN)
» DLMS-Cosem conform.

Technical Specifications

Ratings	Voltage: Direct Current: Ct/Connection:	3*57.7/100V up to 3*277/480V auto ranging In 5A, Imax 120A Ib 1A, Imax 10A
Network Types	Direct Connection: C/t, v/t connection:	4-wire meter, fully operational in 3-wire connection without neutral 3- and 4-wire configurable connections
Accuracy	Direct Connected: Transformer Connected: Reactive energy:	Class 1 or Class B Class 0.2s, Class 0.5s or Class C Class 1 or Class 2
Frequency	50 / 60 Hz	
Standards	Full compliance with IEC 62052, IEC 62053, MID standard EN50470-1 and EN50470-3 and CE marking standards (mechanical, climatic, electrical, electromechanical, metrological)	
Communications	IR-port (IEC 61107), optional RS232C and/or RS485 DLMS-Cosem Protocol (IEC 62056) Integrated in most market leading software packages	

Accessories

Communications	External telephone modem Itron Sparklet modem easily attachable under terminal cover Cabling for external communications devices IR-reading device for connection to PC
Configuration/ Calibration	Customer software for consumption monitoring AIMS PRO Utility Software for configuration and reading
Installation tools	Transformer ratio labels Sealing kit
Documentation	Test certificate User guide Installation Manual

Dimensions
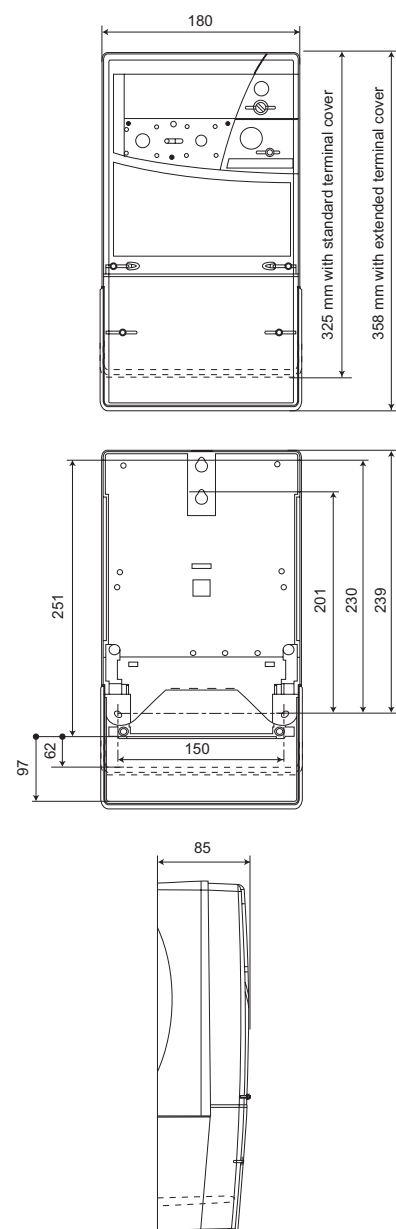
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