



# **ACE SL7000**

Industrial & Substation Electricity Meter Range

Itron's ACE SL700 meter range offers a solution for all industrial and substation applications. Equipped with flexible communication technology combined with elements of traditional C&I metering, the ACE SL7000 meter range offers the versatility and flexibility required to meet today's rapidly changing markets.

## **Flexible**

Designed for direct or transformer connection, ACE SL7000 meters offer a scalable architecture that allows them to be installed on existing and new electricity distribution networks.

# Versatile

The ACE SL7000 meter range can be installed in multiple markets and for several applications. Its auto-ranging power supply and extremely wide measuring range ensures that 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: High accuracy and linearity ensure quality billing data. Instantaneous values for a variety of quantities serve as a base for network monitoring. In addition, simultaneous communication channels ensure that several departments can benefit from the data received from the installed meter base.

#### **KEY FEATURES**

- » Proven experience in multiple markets
- » Accuracy and linearity
- » Multi-energy inputs
- » Simultaneous communication channels

## **Smart**

Compliant with IEC standards, include innovative capabilities.

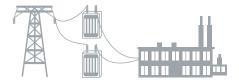
They allow multiple recording of load profiles along with local and remote communication on several lines.



#### **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 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 an auto-ranging power supply for most variants, one type of meter covers many installations configurations.

#### » Reduced Data Collection Cost

Read cycles are kept to a minimum by internal storage of all billing data, and powerful communications capabilities allow cost-effective 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 human intervention. IEC7 evolution brings standard magnet detection and an optional terminal cover opening detection.

#### » Network Monitoring

Our meters allow monitoring of the network and logging of anomalies. This can be used to prevent and repair faulty network conditions.

### » Feature Upgrades

ACE SL7000 meters include an upgrade engine to further enhance functionality and keep metering costs to a minimum through the re-use of existing equipment. Starting with IEC7 version firmware, upgrades can now be performed remotely.

#### » Withstand Adverse Environments

Our meters are designed and tested to cope with severe environmental conditions such as electromagnetic disturbances and network condition variations regardless of the frequency contents.

#### **End-User Benefits**

## » Consumption Monitoring

The meters provide information that is readable online through a dedicated communications port, so that 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 of supply is a contractual parameter.

#### » Excess Consumption Feature

ACE SL7000 meters can monitor consumption against configurable thresholds and trigger 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**

» Storage of up to 16 channels for various quantities in two independent banks.

#### **Multi-Rate**

- » Multi-rate billing for energy and demand.
- » 10 Basic quantities can be selected for billing data.
- » 32 energy-rate registers and 24 demand-rate registers are available.
- » Rate switching mainly performed by internal clock, but can also be triggered externally (versions with I/O lines).

#### **Voltage Quality**

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

## **Auxiliary Power Supply (APS)**

» From IEC7 versions, the optional APS is isolated (2KV) from measurement voltages.

## **Communications**

- » Up to three communication channels (2 electrical & 1 optical) depending on the meter version.
- » Two channels can be used simultaneously.
- » Local- and remote-reading ports.
- » Power to an external modem can be supplied from the meter (PSTN / GSM / GPRS / LAN): in IEC7 versions, the meter now provides up to 3W.
- » DLMS-Cosem conformance.



# **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:  CT, VT connection:	4-wire meter remains operational in 3-wire connection without neutral 3- and 4-wire configurable configurations
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 modems Itron Sparklet modem, powered by the meter, is easily attachable under terminal cover Cabling for external communications devices IR-reading device for connection to PC	
Configuration/ Calibration	Customer software for consumption monitoring Itron ACE Pilot Utility Software for configuration and reading	
Installation tools	Transformer ratio labels Sealing kit	
Documentation	Test certificate User guide Installation Manual	



# **Dimensions**

