

## ACE6000

### Commercial & Industrial Electricity Meter



> ACE6000

ACE6000 four-quadrant load profiling 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.

#### Flexible

Designed for direct or transformer connection, ACE6000 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 wide measuring range, a single meter type can be used across a variety of applications – from large commercial installations to industrial metering.

Accuracy and linearity ensure high quality billing data, (including Load Profiles).

Instantaneous values for a variety of quantities serve as a base for network monitoring.

PSTN, GSM, GPRS and IP communications are supported thanks to DLMS-Cosem Protocol.

#### New product version available



## Adding value

Through the application of the latest-generation metrological and communications technologies, ACE6000 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 DLMS-Cosem communications standards ensures that the meters can be easily integrated into standard data collection systems as well as future GPRS or IP based systems.
- > **Reduced Non-Technical Losses**  
Multiple safety features guard against technical problems being introduced by human intervention including magnet detection function and opening terminal cover detection.
- > **Improved data collection process**  
It is now possible to read the meter (on the display, or via optical port) even in power down.
- > **Feature Upgrades**  
ACE6000 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

- > **Excess Consumption Feature**  
ACE6000 meters can monitor consumption against configurable thresholds and can activate contacts if consumption exceeds limits.
- > **Instantaneous values such as Power Factor, Demand, Volts and Amps are made available for the end-user to help him monitor his consumption.**

## Key Features

### Multi-Energy

Internal measurement of active and reactive power in each direction.

### Load Profiles

Up to 16 channels for various base quantities into two independent profiles. New quantities can be integrated in the LP (alarms, cos Phi per phase, temperature).

### Multi-Rate

- > Multi-rate billing for energy and demand.
- > 10 Basic quantities can be submitted to billing.
- > 32 energy-rate and 24 demand-rate registers are available.
- > Rate switching performed by internal clock.

### Communications

- > Two communication channels.
- > Local- and remote-reading ports.
- > External telephone modem can be supplied from the meter, (PSTN, GSM).
- > DLMS-Cosem compliance opens to GPRS and IP networks.

### Software

Itron offers a complete range of associated software:

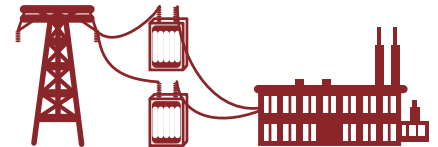
- > AIMS PRO software for reading and programming
- > Compatibility with already deployed AMR systems



### > ACE6000 Meter series

- Basic version without outputs with 1 serial port
- Flexible version with 4 outputs and 1 serial port
- Serial port can either be RS232 or RS485

### > Commercial & Industrial applications



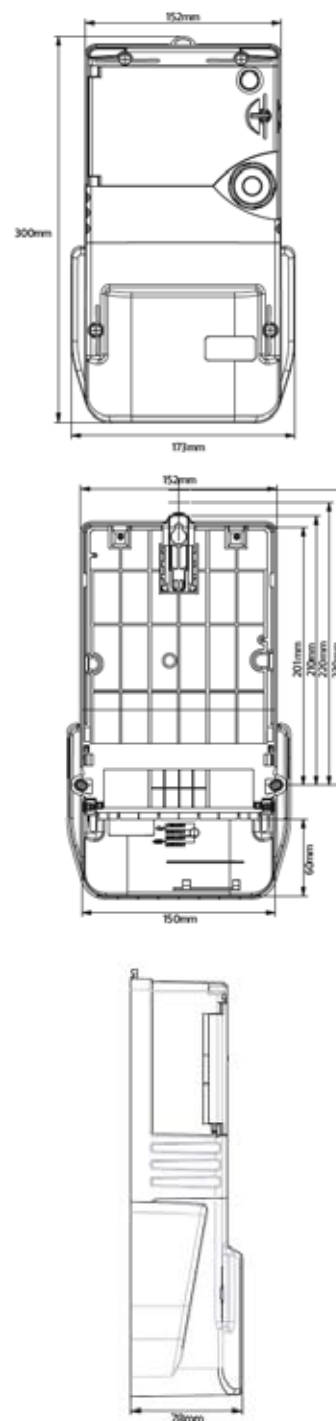
## Technical Specifications

Ratings	Voltage:	3*57.7/100V up to 3*277/480V auto ranging
	Direct Current:	Ib 5A, I <sub>max</sub> 100A
	Ct/Connection:	Ib 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 (for asymmetrical VDE or symmetrical USE connections)
Accuracy	Direct Connected:	Active energy MID: Class B
	Transformer Connected:	Active energy Class 0.5S & MID: Class B
	Reactive energy:	Class 2 or Class C
Frequency	50 / 60 Hz	
Real Time Clock	Back up with external removable battery and internal super capacitor Compliant with IEC 62054-21	
Operating Temperature Range	-40°C to +70°C (specific variant for high temperature operating conditions)	
Standards	Full compliance with MID standard EN50470-1 and EN50470-3 and CE marking standards (mechanical, climatic, electrical, electromechanical, metrological)	
Communications	IR-port (IEC 62056/21 and IEC 62056/42-46-53-61-62) RS232C or RS485 DLMS-Cosem, Protocol (IEC 62056/42-46-53-61-62)	

## Accessories

Communications	External telephone modem
	Cabling for external communications devices
	IR-reading device for connection to PC
	Itron Sparklet modem is easily inserted under the Itron Sparklet terminal cover.
Configuration/Calibration	AIMS PRO Utility Software for configuration and reading
Documentation	Test certificate
	User guide
	Installation Manual

## > Dimensions



### About Itron Inc.

Itron Inc. is a leading technology provider to the global energy and water industries. Our company is the world's leading provider of metering, data collection and utility software solutions, with nearly 8,000 utilities worldwide relying on our technology to optimize the delivery and use of energy and water. Our products include electricity, gas and water meters, data collection and communication systems, including automated meter reading (AMR) and advanced metering infrastructure (AMI); meter data management and related software applications; as well as project management, installation, and consulting services. To know more, start here: [www.itron.com](http://www.itron.com)



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