ACE6000

Commercial & Industrial Electricity Meter

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.

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.

▶ 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

Can store up to sixteen 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.

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.
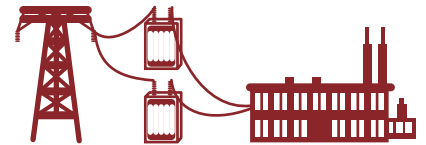

Software

Actaris offers a complete range of associated software:
– ACE PRO for reading and programming
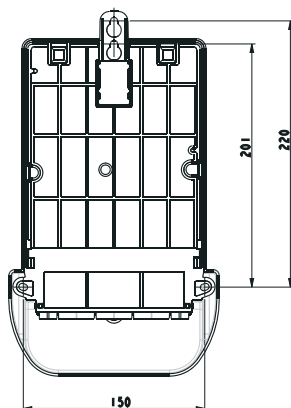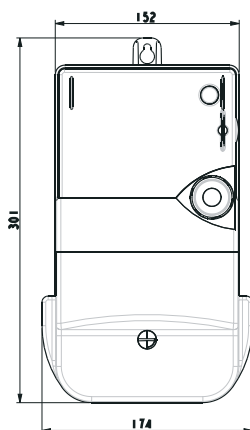– Compatibility with AMR systems already deployed

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**

Dimensions

Technical Data

Ratings	Voltage:	3*57.7/100V up to 3*240/415V auto ranging
	Direct current:	Ib 5A, Imax 100A (under special wiring conditions)
	Ct/connection:	Ib 2.5A, Imax 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:	Active energy Class 1
	Transformer connected:	Active energy Class 0.5S & Class 1
	Reactive energy:	Class 2
Frequency	50 / 60 Hz	
Temperature range	–40˚C to +70˚C	
Real Time Clock	Back up with external removable battery and internal super capacitor Compliant with IEC 61038	
Standards	Full compliance with IEC 62052-11 and IEC 62053-21/22/23 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
Configuration/Calibration	ACE PRO Utility software for configuration and reading
Documentation	Test certificate
	User guide
	Installation manual

Please note, these specifications are valid only after confirmation from Actaris