



# ACE Vision

From Automatic Meter Reading to Network Industrial Management

Due to the increasing demand for electricity and increase in production from renewable energy sources, the electricity power industry requires proactive management. ACE Vision is an Automatic Meter Reading (AMR) system that has evolved to enable industrial and network management applications.

ACE Vision allows continuous monitoring and auditing of the metering data via a secure web-based application. It meets each utility's specific requirements through its interactive dashboards.

#### ACE Vision is designed for:

- » Large industrial customers
- » Small-sized utilities
- » Electricity producers
- » Renewable energy producers

#### KEY SERVICES

##### Customised Display

ACE Vision provides users with customised dashboards that allow them to graphically display valuable information depending on their customer base and management needs including location maps, global carbon foot print and energy consumption breakdown.

##### Grid Management

ACE Vision allows utilities to manage the network by monitoring and displaying

information relating to energy production, regardless of the source of this energy (wind, solar, nuclear etc..).

The system can also send alerts to the grid operator when pre-defined values are reached, for example the ratio between different types of produced energy, allowing operators to maintain security of the grid.

##### Asset Management

ACE Vision can also be used to help determine return on investment. The grid operator can monitor transformer overload and unbalance in near time on the distribution map in order to determine the lifetime of the installed assets.

##### Analysis & Monitoring

ACE Vision can be used to monitor the quality of network power and also the quality of produced energy. This information can then be leveraged to provide reports and analysis on the network quality including harmonics

analysis, wave forms and voltage quality data.

##### Network Security

ACE Vision can be used to ensure network security. The software can interface with the meters to disconnect load, either partially or fully. Alarms can also be sent to inform operators when pre-defined thresholds have been reached.

##### Revenue Protection

ACE Vision monitors and compares the production output and billing data of all generation plants. This precise monitoring can help protect against fraud and power losses and avoid costly interruptions.

##### Reporting

ACE-VISION can be used as a logging tool to export data and pre-defined reports and can also be integrated in or be connected to existing systems such as billing systems.

## FUNCTIONALITY OVERVIEW

### Administration and Parameterization

#### Administration

- » Easy installation and configuration
- » Web interface
- » Back-up restoration

#### Management

- » Account management
- » Customer Care
- » User Profiles
- » Meter management
- » Communication media management
- » Security via passwords

#### Drivers

- » ACE6000
- » SL70000
- » ACE8000
- » DLMS Meters

#### Communication

- » PSTN
- » GSM
- » GPRS
- » TCP – IP
- » HHU / Laptop

### From Collect to Network Services

#### Data Collect

- » Scheduled tasks
- » Billing data
- » Instantaneous data
- » Load Profiles 1 and 2
- » Voltage quality
- » Log book
- » Diagnostic data

#### Data Settings

- » Scheduled tasks
- » Secured configuration
- » Configuration from ACE Pilot
- » Performance indicators

#### Standard Services

- » Graphical visualization
- » Table visualization
- » Selective access
- » Scheduled export
- » Export data
- » Export report
- » Alarm notification

#### Advanced Services

- » Exploitation of read data
- » Billing on demand
- » Phase / Load Balance
- » Check meters
- » Waveform analysis
- » Revenue protection
- » Virtual Power Plant
- » Customised dashboards
- » Network monitoring



#### ACE VISION KEY BENEFITS

- » High Performance
- » Efficient
- » Flexible
- » Customizable
- » Upgradeable

## ACE VISION MOBILE FOR ON-SITE READINGS

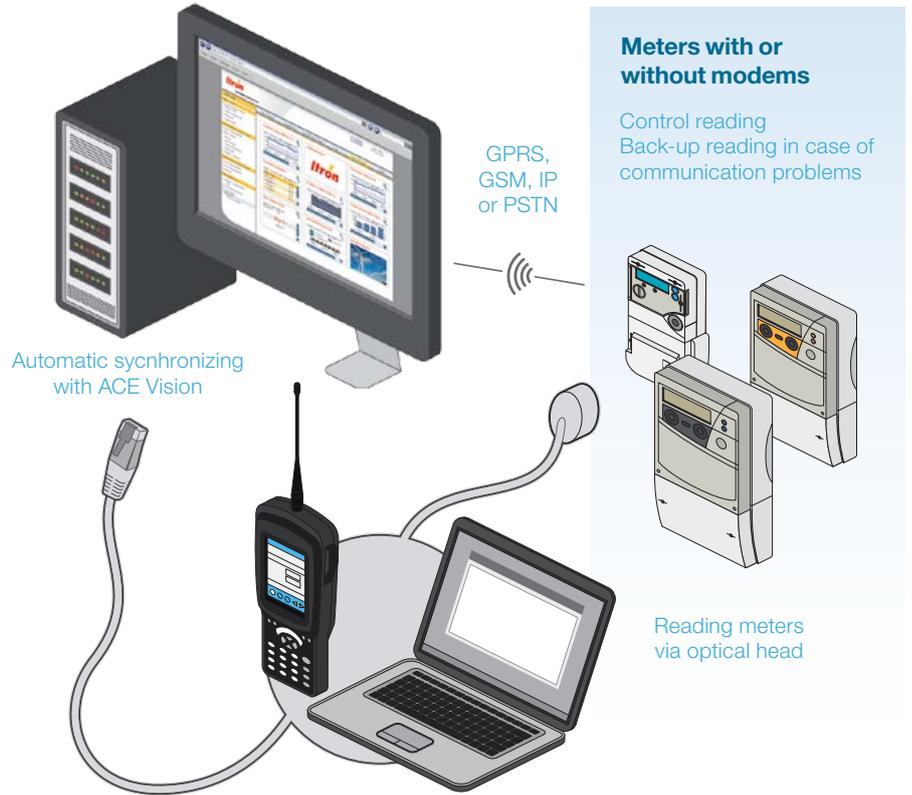


ACE Vision Mobile is an extension of ACE Vision available for HHU and laptops. This mobile software can be used for meters with or without modems, as a backup in case of standard communication media failure or during a maintenance session.

ACE Vision Mobile allows personalised AMR deployment.

All the features available in ACE Vision, such as meter readings and settings, can be found in ACE Vision Mobile.

The data exchanges between ACE Vision and ACE Vision Mobile are secured thanks to complex encryption algorithms.



## SPECIFICATIONS

### Administration

- » Compatible XP, Vista, Windows7, Windows Server 2008
- » Communication types ( PSTN, GSM, GPRS, TCP-IP, HHU, Laptop)
- » MySQL data base
- » Data base back up / restore facilities
- » Users configuration upon various profiles
- » Web services available for easy third party software integration

### Metering Points

- » Scalable up to 3000 points
- » Manages all Itron C&I and T&D meters and others on demand
- » Schedules up to 8 parallel communications

### Scheduled Exploitation of Data

- » Reads all data from meters (historical sets / LP / diagnostics / instantaneous data)
- » Writing configuration on meters
- » Graphical visualization of data
- » Data reporting and export in various formats (CSV, XML, PDF)

### HHU

- » Windows Mobile 5 or 6
- » Psion WAPG3
- » Others on demand

## COMMUNICATION TYPES



» PSTN



» GSM  
» GPRS



» ADI



» TCP-IP



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