Itron is a world-leading technology and services company dedicated to the resourceful use of energy and water. We provide comprehensive solutions that measure, manage and analyze energy and water.

Itron has been actively involved in the supply, management and operation of full comprehensive Prepayment Metering solutions in all continents. This diverse experience, ranging from deep rural to urbanized environments, has subjected Itron to a host of unique operational problems and unique revenue protection issues. It has also prompted the development of various Itron Operations and Revenue Management systems, custom-designed for both developing and developed environments.

Itron has a long and proud history in the prepayment industry, being one of the first companies to ever introduce prepayment for electricity and gas, and being a founder member of the STS association. The Itron Prepayment Management Platform (IPMP) and the Itron Prepayment Channel Management Platform (IPCMP) represent the most advanced Prepayment Management system for both “Thick” and “Thin” metering available today and into the future.
Thick Prepayment

The Standard Transfer Specification (STS) as detailed in IEC 62055 is an example of a thick prepayment solution where the prepayment account and logic control for the load switch resides in the meter.

Thin Prepayment

In the thin prepayment solution, also referred to as smart prepayment, the prepayment wallet is maintained by IPMP and requires that the meters are AMI meters fitted with load switches.

In both thick and thin prepayment solutions a wide variety of vending channels remain available managed by the Itron Prepayment Channel Management Platform (IPCMP).

By preference both the IPMP and the IPCMP are hosted by Itron and offered as Software as a Service (SaaS). However, the IPMP server can be hosted in the Utility data centre. In either case full disaster recovery coverage is provided.

All management, control and configuration of the system is achieved through web interfaces. Only during deployment will direct physical access be required to the servers.

The Itron Prepayment Management Platform

The primary elements of the IPMP are:

- IPM, Itron Prepayment Manager, which is the hub of the solution and provides the transaction switching and link between the system components. It is also into the IPM that all third party systems such as SAP and the AMI MDC’s integrate.

- Access Control, used to set role based access per system user.

- Meter Management, provides asset control, tariff management, customer and usage point definition and linking.

- Retail Administration, provides access and control of all retailers and vending channels.

- Open Reports, provides all the reporting capability for the system. There are numerous predefined reports and additional reports can be created to suit individual business requirements.

- Consumer Mobile, this is the control point for the Energy Insight application which allows consumers to directly purchase additional prepay credit as well as view their history of purchases and consumption (AMI only).
Itron Prepayment Channel Management Platform

The Retail Administration and Vending Control elements of the Itron Prepayment System are known as the Itron Payments Channel Management Platform (ICPMP).

Functionality available to a management/operations team, via a website, includes:

- **Vendor Management**: users, terminals and prepaid accounts.
- **Terminal Management**: enabling software updates for various terminals.
- **Voucher Management**: adding new voucher types, formats and suppliers.
- **Pricing Management**: discounts for each retailer and token type combination.

Agent Management: assign sales agents to vendors. Automatically calculate the agent’s commissions based on sales.

- **Vendor Group Management**: manage a number of vendors as a group. Designated users of the group have access to their own limited web application to view/manage the vendors in the group.

- **Account Management**: manage vendors’ virtual bank account, including deposit confirmations, transfers and adjustments. Importing of voucher stock via a secure PGP process – the importer never sees the voucher codes.

- **Reports**: 15 standard reports and as many customized reports as required to meet your management needs.

Point of Sale (POS) Terminal Software

ICPMP comes with software for point of sale terminals. In addition to catering for billing and prepaid electricity and water vending, the terminal software together with the ICPMP service supports the management of retailers including access control, prepaid electricity/water and gas account management, shift/bank batch management and reporting.

The software is available for PC and Android devices, typically dedicated POS terminals, but also tablets and phones (with support for blue tooth printers).

Energy Insight

ICPMP’s Mobile Consumer website and mobile phone interface allows consumers to purchase prepaid electricity and monitor their energy expenditure. Features include the creation of a customer-friendly alias for each prepaid meter, the management of multiple meters and multiple mobile wallets as well as a detailed payment history. In addition, comprehensive customised utility branding is also available.

Report

Relevant, accurate, and timeous information is a critical component of the management an efficient vending operation. Therefore, significant effort has gone into the development of an extensive range of reports. System reports can be configured to be emailed automatically to specified recipients or can be drawn directly from the system as and when the need arises. Reports for the following operational functions are included:

- Vendor Management
- Electricity sales
- Vendor commissions
- Utility settlements
- Meter Management

Although the existing reports should meet all general requirements, custom reports can be created if required.