



Knowledge to Shape Your Future

A long-exposure photograph of a city skyline at night. The image shows several tall buildings with lit windows. In the foreground, there are bright, blurred light trails from traffic, creating a sense of motion and energy. The overall color palette is dominated by blues, greys, and yellows from the city lights and light trails.

ChoiceConnect™
Changing the way utilities think about advanced meter data collection

Benefits of ChoiceConnect

With ChoiceConnect, utilities benefit through:

- > *The capacity to concurrently read electric, gas and water endpoints and enhanced monitoring systems with the same collection system*
- > *A sensible, blended approach to deploy handheld or mobile systems and/or fixed network systems to meet operational needs*
- > *Collection of data logging information with mobile or fixed network systems and the operational advantages gained with daily or hourly meter data*
- > *Migration to more advanced data collection systems, such as handheld to fixed network, whenever and wherever business objectives demand, without stranding field assets*
- > *Lower operations and maintenance costs due to deployment flexibility, low cost per point, reduced field service visits and tamper analytics*
- > *Mitigation of future risks with a proven technology platform that can easily extend data collection capabilities for increased operational efficiencies as business cases evolve*
- > *Extending the data collection capabilities beyond the meter with enhanced monitoring technologies*
- > *Transmission of meter data to in-home-displays, empowering consumers to make informed decision about energy and water usage*



ChoiceConnect

Why

- > Demand for energy and water will increase by over 50% in the next 15 years, while additional generation or supply is unavailable or slow to come online.
- > Operational and environmental constraints are impacting the bottom line, or are mandating business transformation.
- > Delivery and distribution infrastructure—built decades ago—is burdened by demand it wasn't designed for and is overdue for an upgrade.

Despite these acute challenges, energy and water utilities are expected to continue to deliver reliable service to their customers, now and into the future. Utilities rely on technology to help manage their issues, but each utility has its own time frame and specific challenges; "one-size-fits-all" technology is not the answer.

Energy and water utilities face a broad range of business challenges, from commodity supply and price pressures to rising operational costs and aging infrastructures. ChoiceConnect offers system flexibility and technology innovation to help utilities sustain and optimize energy and water delivery management.

What

Realizing the broad business challenges and varying data collection needs of our customers, Itron developed ChoiceConnect, an adaptable and advanced metering and telemetry technology for the utility industry. ChoiceConnect is changing energy and water utilities' operations, asset management and engagement with customers as they discover benefits that are reshaping their businesses.

ChoiceConnect is a suite of data collection technologies—handheld, mobile, fixed network and enhanced monitoring systems—all built on Itron's proven, 900 MHz ERT® platform for an array of flexible meter reading options. ChoiceConnect can be deployed in the right combination, at the right cost, based upon specific needs with the option to transition to a more advanced collection system when business requirements change—all while retaining the same electric, gas and water endpoints in the field.

How

ChoiceConnect offers energy and water utilities a wide array of operational, customer service and asset management benefits because of the advanced capabilities provided by its suite of products.

Endpoints

The power of ChoiceConnect starts with electricity, gas and water endpoints, such as the HP CENTRON, 100G and 100W. These are coupled with the enhanced data collection systems that utilize Itron's proven ERT® technology to communicate data to the utility. Our radio-based 900 MHz endpoints for electric, gas and water utilities are offered with different power levels and communication options to meet specific deployment requirements. Accurate and cost-effective, ChoiceConnect endpoints offer proven reliability with an unmatched 20 year battery life and are rugged enough to withstand even the harshest environments. ChoiceConnect endpoints are easy to install and compatible with all leading water and gas meter manufacturers.

Fixed Network Collector CCU 100

The CCU 100 (also known as a collector) is the main collection point for the ChoiceConnect Fixed Network and reads data from Itron electricity meters, gas and water endpoints. The new CCU 100 gathers consumption, daily or hourly meter reads, and other information from endpoints and communicates it back to the utility over a public or private network. When used with the Fixed Network Repeater 100 the coverage territory per CCU 100 is extended. It also manages the collection, processing and storage of endpoint data and can support two-way functionality to the endpoint. Equipped with a backup battery, the CCU100's adaptable design allows for a wide range of installation options, utilizing either AC or solar power.

Fixed Network Repeater 100

Repeaters are used to extend the range of the network and add communication reliability and redundancy between endpoints and collectors. Installed on towers, buildings, poles or other structures, the Repeater 100 collects meter data from Itron electricity meters, gas and water endpoints and relays it to collectors within the network. This makes the ChoiceConnect 100 Fixed Network cost-effective by reducing the number of required collectors.



100W Water Endpoint



100G with METRIS RD Gas Meter

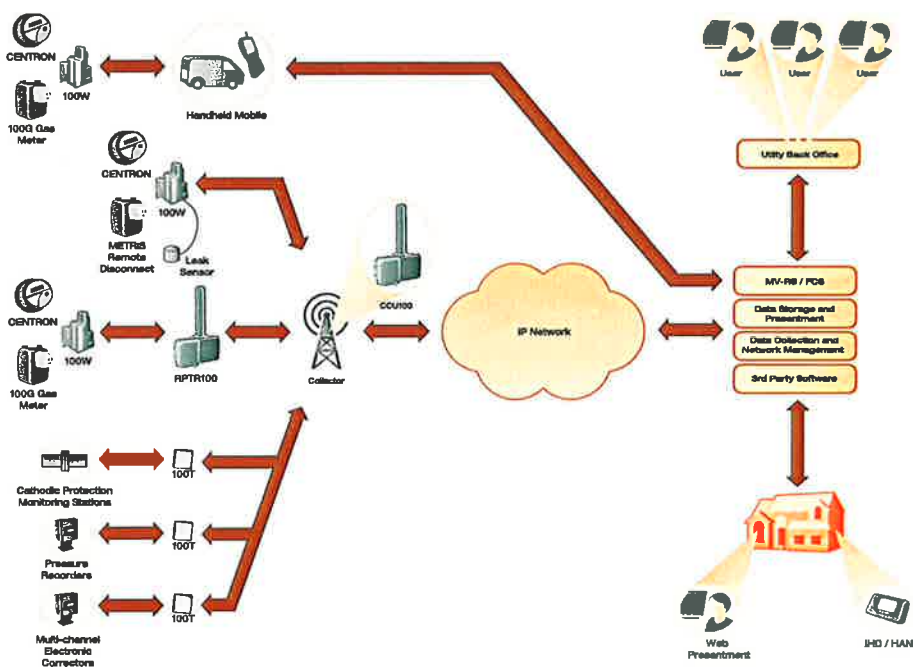


CENTRON C1SR Electricity Meter



CCU 100

ChoiceConnect 100



Multi-channel Electronic Collectors

Pressure Recorders

Cathodic Protection Monitoring Stations

100G Gas Meter

100W

Leak Sensor

METRIS Remote Disconnect

100W

Handheld Mobile

100G Gas Meter

100W

CENTRON

Web Presentation

IHD / HAN

3rd Party Software

Data Collection and Network Management

Data Storage and Presentation

MV-PB / PCB

Utility Back Office

User

User

User

Collector

CCU100

RPT100

100W

CENTRON

Itron Network Software

The Itron Network Software manages the network operations and performance. It controls collection system operation, including processing and storing reads, exporting data to external applications. The Network Software also initiates on-demand reads and other advanced capabilities, and integrates with a meter data management system to enable end-to-end system functionality. A graphical user interface provides easy access to the system, allowing operators to monitor functions, configure collectors, generate reports and view service territory maps and export files.

Mobile & Handheld Collectors

Itron's handheld and mobile solutions combine accuracy and mobility to facilitate the efficient collection of consumption and interval data along with tamper information from ChoiceConnect endpoints. Several options are available to meet a utility's specific business case.

- > Mobile Collection System enables up to 100,000 in route and out of route meter reads per day.
- > Mobile Collector Lite allows utilities to collect up to 10,000 reads daily.
- > The FC300 Handheld computer can collect up to 1000 reads a day.

With millions of endpoints already under ChoiceConnect solutions, many utilities are already well-positioned to take advantage of exciting wide range of mobile or handheld reading functionality.

Itron Handheld and Mobile Meter Data Collection Software

ChoiceConnect includes two choices of software for handheld and mobile meter data collection. These include the popular MV-RS and Field Collection System (FCS) applications. These feature rich software applications allow the utility to easily manage routes, assignments and data collected using handhelds and mobile collectors. Commonly used interfaces allow these systems to be easily integrated with customer information and billing systems and meter data management systems.

Meter Data Management System

Meter Data Management is the primary data repository that integrates MV-RS, FCS and the Network Software data and analytical applications. This integration supports a true end-to-end AMI solution, as well as other business processes, including data collection, data validation and estimation, data management and calculations. Usage and variance reports offer comparative assessments of current and historic consumption to address customer issues. Trending reports spotlight usage patterns to better understand who is using how much and when. Web presentation tools empower customers to understand their water usage and support conservation.



MC3 Mobile Collection Unit



FC300 Handheld Computer



Meter Data Management Software

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 intelligent 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, water and heat 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



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