Itron

Knowledge to Shape Your Future

CCU 100

Introduction

Acquiring meter data is one half of the equation in a successful fixed network system. The other half is delivering that information back to the utility. With the onset of advanced metering initiatives and more robust collection of interval and event data, ensuring your information arrives where and when it should becomes critical. Devices that transport data across the network are a critical link, connecting utility and consumer.

Itron's new CCU 100 makes that link stronger than ever. The CCU 100 (also known as a collector) reads data from Itron electricity meters, gas and water endpoints, and repeaters. Data is forwarded from the collector to the utility over a public wide area network (cellular-based WAN or broadband) or a private WAN supporting IP-addressable packet data. Data is automatically uploaded to the Itron Fixed Network Software and can be used for billing as well as advanced applications and analysis in a meter data management system. Data uploads occur at scheduled intervals. The CCU 100 can also facilitate on-demand requests when needed.

Collectors operate on a 120/240 auto-sensing volt service and are equipped with a backup battery. In the event of an outage, the collector sends an alarm to the Itron Fixed Network Software with information describing various events, including power loss, restoration, and low-battery conditions.

Features and Benefits

Itron's latest fixed-network collector, the CCU 100, supports the needs of today's evolving utility by providing:

> Two-way communication to endpoints and to the repeater to collect on-demand reads and issue network commands

> Robust collection of time-synchronized interval data, when coupled with a meter data management system, helps utilities:
  - Improve customer service
  - Refine forecast consumption
  - Manage and control tamper and theft
  - Develop new rate-based and customer incentive programs
  - Better respond to customer "what-if" questions

> Time-synchronization of endpoint clocks, ensuring data collected territory-wide is accurately time-stamped

> Retrieval of missing interval data in the event of a network outage

> A compact device footprint that is lightweight and unobtrusive

> Flexible and easy installation including tower, building or utility pole-mount options

> Low power consumption

> Solar-powered configurations for locations where hard-wired power is not readily available

> Multiple communication options for public and private WAN backhauls. Public and private technologies can be combined in a deployment, providing a hybrid approach best suited to the communication strengths of a given area

Specifications

Functional

> Power Requirements
  - Power source: 90VAC to 265VAC/ 47 Hz to 63 Hz
  - Power consumption: 12 Watts Maximum 7.5 Watts Typical
  - Power cable with photocell adapter for street light mount
  - Power connectors: watertight and keyed
  - Backup battery: 6 VDC, 4.5 AH lead-acid, 1.5 hour operating duration
> Operating Environment
  - Operating and storage temperatures: -40C to +60C (-40F to 140F) ambient
  - Operating humidity: 0 to 95% non-condensing relative humidity
> Product Details
  - Product life: 15 years
  - Product identification: numeric and bar code serial number
  - Certification: meets or exceeds applicable ANSI C12.1 or equivalent standards

Operational

> Endpoint Transceiver Operating Frequency
  - 903.0-926.8 MHz
> Backhaul Specifications
  - Ethernet
  - Flexible Private LAN options via Ethernet connection
  - HSPA/UMTS
  - EDGE/GPRS/GSM
  - CDMA EV-DO Rev A
  - CDMA 1xEV-DO Rev 0
  - CDMA 1xRTT
  - CDMA IS-95

Regulatory and Standards

> FCC, CFR 47, Part 15 Class B certified

Physical

> Dimensions
  11.6" x 6.3" x 3.9" (29.5 cm x 16.0 cm x 9.9 cm)
> Weight
  - 6.3 lbs. (2.9 kg) with battery

Installation Methods

> Utility pole mount
> Street light pole mount, optional photocell power adapter
> Roof mount
> Wall mount
> Tower configuration

Host Processing Software

> Itron Network Software
> Optional Hosted Services

Mounting Options

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