

# MC3

## Mobile Collection System

### Overview

MC3 represents the next generation in drive-by data collection for Itron ChoiceConnect™ wireless automated meter reading (AMR) solutions. Its combination of performance, portability and affordability provide for improvements to a utility's infrastructure, regardless of the type or size of their service. MC3 helps a utility to maximize efficiency and reduce costs associated with meter reading operations while still allowing for superb customer service.

Powered by Itron SRead™ radio technology, the MC3 offers unparalleled drive-by meter reading performance, yet is small enough to fit in any vehicle and can be easily transferred between vehicles, eliminating the need for an automobile dedicated to meter reading. Whether it's electric, gas or water, from monthly consumption reads to the collection of interval data, the MC3 offers read performance, accuracy and ease-of-use—all in one cost-effective solution.

### MC3 Features

Never before has such robust meter reading performance been contained in such a convenient and affordable package.

- > Exceptional meter reading performance in small size
- > Short-range wireless capability for route upload/download
- > Simultaneous reading capability for multiple routes
- > Reads both "bubble-up" and "wake-up" endpoints
- > GPS Mapping for reduced drive times and missed reads
- > Out-of-route read collection to reduce special read visits
- > Support for all 100G and 100W Datalogging Activities

### Functionality Profile

MC3 can collect up to 100,000 readings a day in a single route or multiple routes being read simultaneously. The potential savings are substantial when compared to the few hundred meters read per day by a typical walk-by system. The MC3 can also collect out-of-route readings used to fulfill off-cycle reading requests without dispatching a technician.

Itron SRead radio technology offers increased read sensitivity and simultaneously listens over 80 channels to improve route reading times and range. This new technology can be equipped with an optional antenna configuration for added read performance if desired. The MC3 radio has demonstrated the ability to read up to 10,000 ERTs per minute.

### GPS Mapping

Equipped with GPS mapping, MC3 allows the meter reader to visually confirm which meters have been read and which have not, or if any have a special priority on any given route. This powerful feature minimizes missed reads and consecutive estimates while reducing drive times. The mapping view also includes a special display setting which provides better viewing when operating at night. Once the route has been completed and the meter reader has returned to the office, the mobile administrator can "play back" the route and identify opportunities to improve meter reading reliability thus reducing drive time and fuel consumption.

### Advanced AMR for Gas and Water Metering

Gas utilities can utilize their MC3 in order to extract up to 40 days of hourly data from the 100G and 100W Datalogging ERTs. This brings additional value to mobile customers by enabling them to extract, via RF, the following data during monthly meter reading.

- > Move in/move out reads for a specific date
- > Daily data for customer service and billing disputes
- > Monthly gas balancing reads
- > Hourly data to facilitate load studies and conservation programs
- > Data to support mid-cycle rate changes



## Specifications

### Operating Frequency

- > Transmitter: 952 or 956 MHz
- > Receiver operating frequency: 908–924 ISM Band
- > Output power: 6.5 Watts peak
- > Data integrity: Verified in every message

### Functional

- > Power supply: 12V DC vehicle power supply
- > Power consumption: 5 Amps maximum
- > FCC compliance: Part 101
- > Fully rugged computer: Panasonic CF-30
- > Processor: 1.6 GHz Intel Core(tm) 2 Duo processor, 1066 MHz FSB, 6 MB L2 cache
- > Disk Space: 160GB
- > Memory: 2048 MB SDRAM
- > Display: 13.3" 1024x768 XGA LCD touchscreen (9-1000 nit sunlight-viewable)
- > Interface: 3x USB 2.0, Type II PC Card slot, SD card, ExpressCard/54
- > Operating System: Windows® XP operating system, SP2

### Mounting and Wiring Options

- > Wiring Options
  - Permanent – Permanent wiring includes a through the roof antenna base and a fuse block power cable
  - Portable – Portable wiring includes a magnetic mount antenna base and a cigarette lighter power cable
- > Mounting Options
  - Sled Mount – The Panasonic Toughbook comes attached to a sled that can be easily and safely installed on any seat in the vehicle.
  - Pedestal Mount – The Panasonic Toughbook comes with a vehicle dock that can be attached to a pedestal that is installed in the vehicle.  
*Note the pedestal is not included.*

### Environmental

- > Operating temperature: -4°F to +122°F (-20°C to +50°C)
- > Storage temperature: -40°F to +160°F (-40°C to +71°C)
- > Humidity limits: 5 to 95% non-condensing relative humidity

### Endpoint Compatibility

- > All legacy Itron ERT® modules
- > 40GB gas ERT modules
- > 100G gas ERT modules
- > 60W water ERT modules
- > 100W water ERT modules
- > Itron CENTRON® electricity meters equipped with R300 modules
- > Itron CENTRON Polyphase electricity meters equipped with R300 modules
- > Itron SENTINEL® electricity meters equipped with R300 modules

### Physical Dimensions

- > MC3 Radio: 13"W x 11.25"L X 2.75"H
- > Sled: 13"W X 19"L X 9.5"H
- > CF-30 Laptop: 11.9"W X 11.5"L X 2.7"H

### Weight

- > MC3 Radio: 10 lbs
- > Sled: 13.2 lbs
- > CF-30 Laptop: 8.4 lbs

MC3 comes complete with MC3 Radio, Mobile Collection software, Panasonic Toughbook CF-30, mounting and wiring hardware and documentation.

### Host Processing Software

MC3 is compatible with all versions of Itron meter reading applications including Integrator, Field Collection System, MV-RS® and Premierplus4.

## 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](http://www.itron.com)



### Corporate Headquarters

2111 North Molter Road  
Liberty Lake, WA 99019  
USA

Phone: 1.800.635.5461

Fax: 1.509.891.3355

[www.itron.com](http://www.itron.com)