The IP Remote Reader provides daily email, FTP or website-based access to meter reading data. Read data is transmitted via the property's local internet service using a standard ethernet connection. The recommended high speed DSL or cable internet service is typically already in place, or is available for less than a dedicated phone line.

- Transmits Read Data Daily Via Email or FTP
- Provides Dedicated, 24/7 Remote Access to Read Data with www.MasterMeter.com Website
- Utilizes TCP/IP for Data Transmission Via the Internet
- Works with Virtually Any Internet Service Provider (high-speed cable or DSL recommended)
- Includes Antenna, 25’ Antenna Cable and 1/4’ RJ45 Cat-5e Network Cable

The PC Remote Reader provides a dial-in connection for remote collection of meter reading data. 3G Technician Software is provided for viewing/reporting meter read data on-site.

- Dedicated Desktop Computer with Keyboard, Mouse and Monitor
- Provides “Dial-In” Connection for Remote Read Collection (dedicated line recommended)
- Collects and Stores All Property Read Data in a MSSQL Database
- Integrated 3G Technician Software for On-Line Viewing of 3G Meter Data and Field Programming of 3G Meters
- Includes DIALOG 3G Receiver, Antenna, Power Cable, and 25’ Antenna Cable
- 100% Connection/Free Design Reduces Tamper Temptation

DIALOG® 3G RF EQUIPPED METERS

Master Meter 3G Integrated Meters and Universal Retrofit Components feature true Connection-Free technology, requiring no external wires or connections. The RF transceiver, battery and antenna are enclosed and permanently sealed providing absolute protection against water intrusion. Our unique, miniature transmitter/receiver incorporates leading technology to provide reliable, accurate readings as well as automatic detection of tampering, leaks, and theft (backflow).

- Reads and Wirelessly Transmits Usage Data
- Self-Contained, Permanently Sealed for Protection Against Water Intrusion

DIALOG® 3G READER

In Fixed Base applications the receiver is part of the PC or IP Remote Reader selected. As a stand alone receiver can be used for Mobile AMR / driveby collection of meter reading information.

- Receives Data Transmissions From 3G Meters and 3G RepReaders
- Works within Fixed Base, Drive-by and Walk-by Read Systems
- Line of Sight Range of 2,500 feet, 200-1,000 feet Indoors or From the Meter Box. *Distances may vary

DIALOG® 3G REP READER

The RepReader is similar to the receiver but has the added ability to rebroadcast or repeat the RF meter reading data it receives. AC powered units continually receive, the 3G Receiver meter reading data and repeat the collected data to a Remote Reader every 12 minutes. Solar powered units wakeup every 4 hours, collect data and then repeat the collected data to a Remote Reader.

- Captures and Rebroadcasts Read Data from a Group of Meters
- Line of Sight Rebroadcast Transmission Typically 2.5 Times Meter Transmission Range at Property.
- Install Flexibility with AC or Solar Powered Options
- Solar Units Conserve Internal Power Cycling On/Off for Transmission Every 4 hours
- Wall or Pole Mount, Indoors or Outdoor

Benefits:
- WATER > GAS > ELECTRIC
- Universal XTR: Retrofit for Electronic, Absolute and Pulse Output Encoders
- Gas: Clean 3G Retrofit Available for Most Existing Gas Meters
- Electric: 3G Integrated in Sensus iCon™ Electric Meters
- Lower Net Operating Costs
- Keep Rising Utility Costs From Cutting Into Costs Rolled In
- Advertise Lower Rents Without Utility
- Increase Property Value
- Improve Property Cash Flow
- Easy to Understand Billing vs. Complex Accounting Methods
- Rewards Their Conservation Efforts
**The Right Fit – Right Where You Need It.**

When it comes to submetering systems, one size rarely fits all. Each property presents unique challenges — Master Meter meets these challenges head on. To ease adoption our ConnectionFree™ AMR system completely eliminates external wires resulting in significant labor cost savings during installation, in addition to lowering lifetime cost of maintenance. Wires are proven to be the leading cause of maintenance related issues on competitive designs, so we eliminated them. Our 3G Integrated Registers combine with our proven Multi-Jet or Positive Displacement meters, while our Universal 3G Interpreter™ register can retrofit virtually any water meter you may already have installed — in minutes. For operating in tight quarters, Master Meter’s exclusive Flexible Axis can retrofit virtually any water meter you may already have installed — in minutes. For operating in tight quarters, Master Meter’s exclusive Flexible Axis can retrofit virtually any water meter you may already have installed — in minutes.

**Solutions for What Matters Most:**

- Water Theft Notification
- Leak Notification
- Early or Unannounced Move-outs
- Unauthorized Movers
- Controlled Data Access by RBC from Anywhere in the World

- Reporting for Water, Gas & Electric
- Wireless Fixed Network with Simultaneous Support for Handheld or Mobile Read Collection
- Online Data and Billing Management

**Master Meter Submetering System Architecture**

**FEATURES & BENEFITS:**

- **Award Winning** DIALOG 3G® ConnectionFree™ AMR System Design
- **Flexible Architecture** Adapts to Wide Range of Property Types and Applications
- No Wires Means Less Labor Costs on Install, Lower Life Time Maintenance Costs, and Reduced Tamper Temptation
- **Quick and Efficient Wireless Read Data Collection**
- **Advanced 3G Features:**
  - 4,000 Read Data Logging - gives you control of the facts when addressing a billing dispute
  - Revenue Impact Alerts™ Protect Against Leaks, Tampering, Theft-blacklisting, and Zero Consumption (unannounced move outs), and Unauthorized Movers
  - **Available Variety of 3G Integrated Meters to Meet All New Meter Requirements**
  - **Universal Retrofit Components to Utilize Existing Infrastructure**
  - **Remote Read Access with Seamless Integration into Most Billing Systems Means Freedom of Choice for Read, Bill and Collect (RBC) and Property Owners**
  - Billing and Accounting Applications Available

**On-Site and Remote Read and Data Management**

- **Aggregate read data is available when and where you need it.** Our system allows for both on-site and remote read administration via either a dedicated MasterLinx™ PC or IP Remote Reader or relayed through a series of DIALOG 3G RepReaders. Strong signals from the registers minimize the number of 3G RepReaders required in the system. Where structure or terrain may present challenge to signal broadcast, RepReaders can help ensure clean transmission by providing signal boost at key locations. Flexible power options for 3G RepReaders include the choice of AC or solar powered units.

**Reliable Wireless Reporting at Any Property**

- 3G equipped registers wirelessly transmit read data from their installed location either directly to our MasterLinx™ PC or IP Remote Readers or relayed through a series of DIALOG 3G RepReaders. Strong signals from the registers minimize the number of 3G RepReaders required in the system. Where structure or terrain may present challenge to signal broadcast, RepReaders can help ensure clean transmission by providing signal boost at key locations. Flexible power options for 3G RepReaders include the choice of AC or solar powered units.

**DATA SOURCE:**

- Data acquiSitioN:
  - Simultaneous Support for Handheld or Mobile Read Collection
  - Wireless Fixed Network with Internet Access Point for Remote Read and Data Management
  - DIALOG 3G RepReader
  - DIALOG 3G Receiver – Integrated in Virtually Any Property
  - Daily Reading Email
  - FTP Reading File Transfer
  - www.MasterLinxASP.com

**DATA ACQUISITION:**

- **DATA SOURCE:**
  - DIALOG 3G RepReader — Integrated in RepReaders and RemoteReaders
  - DIALOG 3G RepReader
  - MasterLinx PC Remote Reader
  - MasterLinx IP Remote Reader
  - MasterLinx ASP™ Provides Online Access Point for Remote Read and Data Management
  - MasterLinx BridgeBuilder™ Provides Seamless Integration with Virtually any Billing Software used by RBC

**DATA CONTROL:**

- **DATA SOURCE:**
  - MasterLinx ASP™ - Provides Online Access Point for Remote Read and Data Management
  - MasterLinx BridgeBuilder™ Provides Seamless Integration with Virtually any Billing Software used by RBC
The Right Fit – Right Where You Need It.

When it comes to submetering systems, one size rarely fits all. Each property presents unique challenges — Master Meter meets these challenges head on. To ease adaptation our ConnectionFree AMR system completely eliminates external wires resulting in significant labor cost savings during installation, in addition to lowering lifetime cost of maintenance. Wires are proven to be the leading cause of maintenance related issues on competitive designs, so we eliminated them. Our 3G Integrated Registers combine with our proven MultiJet or Positive Displacement meters, while our Universal 3G Interpreters can retrofit virtually any water meter you may already have installed — in minutes. For operating in tight quarters, Master Meter’s exclusive Flexible Axis can retrofit virtually any water meter you may already have installed — in minutes. For operating in tight quarters, Master Meter’s exclusive Flexible Axis can retrofit virtually any water meter you may already have installed — in minutes. For operating in tight quarters, Master Meter’s exclusive Flexible Axis can retrofit virtually any water meter you may already have installed — in minutes. For operating in tight quarters, Master Meter’s exclusive Flexible Axis can retrofit virtually any water meter you may already have installed — in minutes.

Reliable Wireless Reporting at Any Property

3G equipped registers wirelessly transmit read data from their installed location either directly to our MasterLinx™ PC or IP Remote Readers or relayed through a series of DIALOG 3G RepReaders. Strong signals from the register minimizes the number of 3G RepReaders required in the system. Where structure or terrain may present challenge to signal broadcast, RepReaders can help ensure clean transmission by providing signal boost at key locations. Flexible power options for 3G RepReaders include the choice of AC or solar powered units.

On-Site and Remote Read and Data Management

Aggregate read data is available when and where you need it. Our system allows for both on-site and remote read administration via either a dedicated MasterLinx™ PC Remote Reader or our MasterLinx™ IP Remote Reader. Our PC solution is ideal for owners that require a dedicated workstation for on-site reading and 3G meter programming while still allowing for remote reads access via dial in connection. Our Internet Protocol (IP) based system transmits read data via the internet for remote access and online administration via website, and/or the Read, Bill and Collect (RBC) company of your choice. Our read system seamlessly integrates with most any billing software, so property owners and RBCs can install with confidence while maintaining freedom of choice in their billing packages and service providers.

Master Meter Submetering System Architecture

**FEATURES & BENEFITS:**
- Award Winning DIALOG 3G® ConnectionFree™ AMR System Design
- Flexible Architecture Adapts to Wide Range of Property Types and Applications
- No Wires Means Less Labor Costs on Install, Lower Life Time Maintenance Costs, and Reduced Tamper Temptation
- Quick and Efficient Wireless Read Data Collection
- Advanced 3G Features:
  - 4,000 Read Data Logging - gives you control of the facts when addressing a billing dispute
  - Revenue Impact Alerts™ Protect Against Leaks, Tampering, Theft (backward), and Zero Consumption (unannounced move outs), and Unauthorized Movers
  - Available Variety of 3G Integrated Meters to Meet All New Meter Requirements
  - Universal Retrofit Components to Utilize Existing Infrastructure
  - Remote Read Access with Seamless Integration into Most Billing Systems Means Freedom of Choice for Read, Bill and Collect (RBC) and Property Owners
  - Billing and Accounting Applications Available

**Solutions for What Matters Most:**
- Water Theft Notification
- Leak Notification
- Early or Unannounced Moveouts
- Unauthorized Movers
- Controlled Data Access by RBC from Anywhere in the World

**DATA SOURCE:**
- Water, Gas & Electric
- 3G Integrated MultiJets, Positive Displacement, or Flexible Axis Meters
- 3G Interpreter – Universal Upgrade of Existing Water Meters
- 3G XTR - Universal Connectivity to Existing Competitor Meters Equipped with Encoder or Pulse Output Registers

**DATA ACQUISITION:**
- DIALOG 3G RepReader – Integrated in RepReaders and RemoteReaders
- DIALOG 3G RepReader
- MasterLinx PC Remote Reader
- MasterLinx IP Remote Reader

**DATA CONTROL:**
- MasterLinx™ – Provides Online Access Point for Remote Read and Data Management
- MasterLinx™ BridgeBuilder™ Provides Seamless Integration with Virtually any Billing Software used by RBC

www.MasterLinxASP.com

Daily Reading Email
FTP Reading File Transfer
www.MasterLinxASP.com

3G equipped meters installed in apartments, mobile home parks, multi-tenant buildings

[Image of Master Meter Submetering System Architecture]
Master Meter Submetering System Components

**MasterLine™** IP REMOTE READER
The IP Remote Reader provides daily email, FTP or website-based access to meter reading data. Read data is transmitted via the property’s local internet service using a standard ethernet connection. The recommended high speed DSL or cable internet service is typically already in place, or is available for less than a dedicated phone line.
- Transmits Read Data Daily Via Email or FTP
- Provides Dedicated, 24/7 Remote Access to Read Data with www.MasterLineASP.com Website
- Utilizes TCP/IP for Data Transmission Via the Internet
- Works with Virtually Any Internet Service Provider (high-speed cable or DSL recommended)
- Includes Antenna, 25’ Antenna Cable and 1’RJ45 Cat5e Network Cable

**MasterLine™** PC REMOTE READER
The PC Remote Reader provides a dial-up connection for remote collection of meter reading data. 3G Technician Software is provided for viewing/reporting meter read data on-site.
- Dedicated Desktop Computer with Keyboard, Mouse and Monitor
- Provides "Dial-up" connection for Remote Read Collection (dedicated phone line recommended)
- Collects and Stores All Property Read Data in a MS SQL Database
- Integrated 3G Technician Software for On-Line Viewing of 3G Meter Data and Field Programming of 3G Meters
- Includes DIALOG 3G Receiver, Antenna, Power Cable, and 25’ Antenna Cable
- 100% Connection Free Design Reduces Tamper Temptation

**DIALOG™** 3G RF EQUIPPED METERS
Master Meter’s 3G Integrated Meters and Universal Retrofit Components feature true Connection-Free technology, requiring no external wires or connections. The RF transceiver, battery and antenna are enclosed and permanently sealed providing absolute protection against water intrusion. Our unique, miniature transmitter/receiver incorporates leading technology to provide reliable, accurate readings as well as automatic detection of tampering, leaks, and theft (backflow).
- Reads and Weekely Transmits Usage Data
- Self-Contained, Permanently Sealed for Protection Against Water Intrusion

**DIALOG™** 3G REP READER
The RepReader is similar to the receiver but has the added ability to rebroadcast or repeat the RF meter reading data it receives. AC powered units continually receive, the 3G RepReader meter reading data and repeat the collected data to a Remote Reader every 12 minutes. Solar powered units wakeup every 4 hours, collect data and then repeat the collected data to a Remote Reader.
- Captures and Re-broadcasts Read Data from a Group of Meters
- Line of Sight Rebroadcast Transmission Typically 2.5 Times Meter Transmission Range at Property.
- Install Flexibility with AC or Solar Powered Options
- Solar Units Conserve Internal Power Cycling On/Off for Transmission Every 4 hours
- Wall or Pole Mount, Indoors or Out

**DIALOG™** 3G RECEIVER
In Fixed Base applications the receiver is part of the PC or IP Remote Reader selected. As a stand alone receiver can be used for Mobile AMR / driveby collection of meter reading information.
- Receives Data Transmissions From 3G Meters and 3G RepReaders
- Works within Fixed Base, Driveby and Wallaby Read Systems
- Line of Sight Range of 2,500 feet, 2001,000 feet indoors or From the Meter Box. *Distances may vary

**DIALOG™** 3G INTERPRETER
- Factory Programmed for Easy Installation, Re-programmable in the Field with 3G Technician Software
- 100% Connection-Free Design Reduces Tamper Temptation
- Water: Master Meter Positive Displacement, MultiJet, and Flexible Axis Meters
- 3G Interpreter: Universal Upgrade for Existing Installed Meters from AMCO, Badger, Hersay, Neptune and Sensus
- Universal XTR: Retrofit for Electronic, Absolute and Pulse Output Encoders
- Gas: Clean 3G Retrofit Available for Most Existing Gas Meters
- Electric: 3G Integrated in Sensus Care™ Electric Meters

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**The Smart Choice in Submetering**
Master Meter provides property owners and submetering companies with advanced submetering technology for water, gas and electric applications. Combining our award-winning AMR read system with an impressive array of meter technology and universal retrofit components allows for a flexible and cost-effective, submetering roll-out at virtually any property.

**Invest with Confidence... WITHOUT LIMITATIONS**
Master Meter’s submetering solutions are designed for maximum flexibility promoting ease of adaptation and universal freedom of choice in meter and billing service technology. Both are important factors to consider in choosing, or recommending, a submetering system, investing in new hardware only where it makes sense, while leveraging existing assets, can result in significantly lower start up costs, quicker implementation and ultimately a faster return on investment.

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**Benefits:**
- Water - Gas - Electric
- Submetering Benefits Property Owners:
  - Lower Net Operating Costs
  - Increase Property Value
  - Advertise Lower Rents Without Utility Costs Rolled In
  - Keep Leasing Utility Costs From Cutting Into Your Profits
- Submetering Benefits Residents:
  - Bilked Only For Their Actual Usage
  - Easy to Understand Billing vs. Complex Allocation Methods
  - Rewards Their Conservation Efforts