

Installation Instructions



DataSource915-PIT

Description

DataSource915-PIT is for **PIT INSTALLATIONS ONLY**. It attaches to the following water meter registers:

- Single pulse,
- Master Meter Dual-Pulse,
- Electronic encoded AMCO Scancoder,
- Electronic encoded (ECR),
- Electronic encoded Neptune / Schlumberger ARB V,
- Electronic encoded ProRead/AutoDetect/E-Coder™ registers.*

*With E-Coder registers DataSource915-PIT will read register ID and reading only.

DataSource915-PIT sends meter data via radio frequency (RF) signal to a receiving unit; HandTrackIT®, FastTrackIT® or CellTrackIT®.

Required Tools & Equipment

The following items are recommended for proper DataSource915-PIT installation:

- 3M® Type UY2 gel-filled splice connectors and crimping pliers.
- Suitable water resistant PU or Acrylic Potting Compound.
- Computer running Windows XP®, 2000®, 98® or NT®.
- ConFigIT® device (Mod Strike 14 or higher) and ConFigIT software version 6.5.07 or higher.
- ConFigIT cable, part number 330-190-10 (Lemo) or 320-300-10 (9-pin Dtype).
- 4 AA batteries or power cable.
- HandTrackIT, FastTrackIT, or CellTrackIT receiver with connecting cable.

Mounting Instructions

Mount DataSource915-PIT upright facing the direction of the receiver. Avoid placing DataSource915-PIT on any metal walls or large metal objects. Do not place DataSource915-PIT closer than 3 inches to metal pit or vault lids.

Configuration & Installation Procedure

1. Connect DataSource915-PIT to the meter register using 3M Type UY2 gel-filled splice connectors and gel cap crimping pliers.
2. If the default settings (see 'Factory Default Settings' section) are suitable for the installation then:
 - DataSource915-PIT can be activated without ConFigIT by using a small bar or horseshoe magnet. Ensure that the magnet is held vertically over the center of DataSource915-PIT just below the stripe.
3. If the default settings need to be changed, use the ConFigIT device and software:
 - After performing as READ, select the register required from the pull down list.
 - To use DataSource915-PIT with ProRead, AutoDetect or E-Coder register, set meter interface mode to 'AutoDetect'.
 - To use ID printed on the side of DataSource915-PIT case, select 'Use current ID' button.
 - To enter new ID, select 'Programmed by User' button and enter ID in the cell below button.
 - Set leak detection threshold to required value.
 - Turn on DataSource915-PIT by setting Transmit Interval (default setting is every 5 seconds) to 5 or 10 secs for FastTrackIt, 10 secs or greater for HandTrackIt. The transmit interval for CellTrackIt operation depends on the required sample rate.
4. Apply potting compound to the MIF wire cavity and ensure that the Gel Caps are completely covered.
5. Ensure that the MIF wire terminations at the meter are waterproofed in accordance with the Meter manufactures installation procedures.

Blue Tower Communications Inc www.bluetowercomms.com
US Office - 201 Shannon Oaks Circle, Suite 200, Cary, NC 27511 Tel +1 919-654-7352

6. Mount DataSource915-PIT as described in "Mounting Instructions" section above.
7. Verify that the signal is received with the appropriate receiving device from the desired location.
8. Verify that the reading corresponds to the visual indication on the meter register.
NOTE: Max reading (pulse) = 16,777,215
Max reading (encoder) = 9,999,999 - left most digits are dropped.
9. If appropriate check that encoder status is reported as 0. Encoder error codes are shown in the Encoder Status table below.

Error Codes

Tamper

Single pulse mode allows tamper readings of 1 through 63 which indicates a count of the tamper wire disconnections. The value should be recorded at the time of connection and any subsequent increments should be investigated.

Dual-Pulse mode does not allow tamper detection because all wires are used to count pulses.

Encoder Status

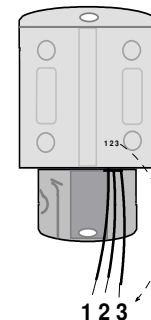
The encoders will display the following codes:

Error Code	Description
64	No communication from register
65	Open wheel in register
66	Shorted wheel in register
68	Undefined data error from register

Leak

Error Code	Description
128	Leak Flag

Wire Connections



Single Pulse Meters				
Manufacturer	Model	Wire 1 Pulse	Wire 2 Ground	Wire 3 Tamper
AMCO/ ABB	PSM-T	Green	Blue	Blue
AMCO/ ABB	Pulsar	Red	Black	Black
Master Meter	Single-Pulser	Black	Green	Green
Badger®	RTR 3-wire	Green	Red	Black
Badger	DSI-IL & RTR 2-wire	Red	Black	Black
Metron-Farnier	Spectrum	Red	Green	Green

Installation Instructions



DataSource915-PIT

Dual Pulse Meters		Red	Green	Black
DataSource915-PIT monitors both meter switches and will increment the counter after both have been closed in sequence.				
Encoders				
Scancode		Green	Black	Red
ECR		Red	Black	Green
	Compatible with Hersey® Meters (Translator), Metron-Farnier, Sensus/Invensys® and others.			
ARB V		Black	Green	Red
ProRead/ AutoDetect		Black	Green	Red

DataSource915-PIT is mounted in the center of the pit's bottom with the unit facing the direction of the meter reader.



Factory Default Settings

DataSource915-PIT is provided with the following default settings:

DataSource915-PIT	Interface	ID Source	Utility Code
915-PIT	Pulse	DataSource915-PIT ID	49

Example 2: Obround Yokebox

The Yokebox includes three (3) metal castings: a base, upper body and lid. The unit measures 10 5/8" long by 7 1/8" wide by 11" deep. DataSource915-PIT is mounted in a vertical manner above the water line with the unit facing the direction of the meter reader.



Warnings & Precautions

Warning: Changes or modifications to product not expressly approved by Blue Tower Communications Inc could void the user's authority to operate the equipment. See FCC information below.

This sheet provides instruction needed to successfully connect, configure and read DataSource915-PIT for the water meters listed above in the description section. This sheet is merely a supplement to training in the operation of the Blue Tower DataStream AMR system. For training information, contact Blue Tower Communications Inc directly.

FCC Information

This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. The antenna(s) used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) this device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

This device is only authorized for use in water pit installations with metal enclosures and only for below ground use. Pit construction should be comparable to type specified in the FCC filing. See the following examples.

Pit Mounting Examples

DataSource915-PIT is only approved for use in the following types of below-ground installations. Placement of the DataSource915-PIT within the enclosure is important for satisfactory performance. Follow the below examples for optimum performance.

Note: A light colored DataSource915-PIT is used for illustration purposes only. A blue DataSource915-PIT should be used in the following installations for optimum performance.

Example 1: Square Hand Hole

The Square Hand Hole includes three (3) metal castings: a base, cylindrical body and square lid. The unit measures 7" wide by 12" deep.

Blue Tower Communications Inc www.bluetowercomms.com
US Office - 201 Shannon Oaks Circle, Suite 200, Cary, NC 27511 Tel +1 919-654-7352

© 2009 Blue Tower Communications Inc. The information contained herein is the property of Blue Tower Communications Inc and is supplied without liability for errors or omissions. No part may be reproduced or used except as authorized by contract or other written permission. All other company names, brand names, and product names are the property of their respective holder(s).