# **Pipeline Locator PCMx**

## Pipeline integrity and corrosion control

Radiodetection's PCMx system allows corrosion and cathodic protection systems (CPS) experts to assess the condition and effectiveness of pipeline coatings. Users can identify defects in coatings and holidays, and short circuits caused by contact with other structures. Our portable 25W transmitters have made great strides in portability and ease of use.



PCMx allows pipeline administrators to identify and prioritize preventive maintenance for pipelines. Prolong the lifespan of your assets by identifying potentially corrosion early.



Working alongside industry experts, Radiodetection pioneered the first Pipeline Current Mapper over 20 years ago. It enabled surveyors to identify possible sources of external corrosion on inaccessible pipelines, including those buried beneath rivers and highways. Since then, it has become the tool of choice for many organisations to locate and pinpoint pipeline coating defects.

PCMx builds on this pedigree, harnessing the power of Radiodetection's most advanced locator technologies to deliver faster results, simultaneous survey measurements, and integrated GPS positioning.



## Faster surveying for quicker results

Increasing number of pipelines, aging infrastructures and more rigorous guidelines result in growing pressure for corrosion specialists to complete surveys and analyse results quicker. The new PCMx system has been designed to meet these challenges with faster measurements and greater portability.

#### One second mapping measurements

With each mapping measurement now only taking one second, survey times are reduced. Integrated GPS ensures each measurement is captured with positional data.

#### Two surveys in one pass of the pipeline

Conduct both ACCA and ACVG surveys with one pass of the pipeline. PCMx allows you to collect both measurement types simultaneously, reducing survey time and getting results faster.

#### More information at your fingertips

Radiodetection's Peak+ technology guides you to your target pipeline quicker while the compass display ensures correct alignment. Simultaneous depth and current measurements give you confidence you are following the correct line.

#### Faster results

A mobile (Android) companion app allows users to chart results in the field improving on-site analysis. Walk back and walk forward features gets you to your next measurement quicker. An additional PC app offers improved charting tools.

#### Improved ergonomics

With a balanced design and lighter weight, (2.2kg, 4.8lb), the receiver is easier to carry over long distances. The convenience of a Li-lon rechargeable battery pack ensures extended runtime.

This system can be used to carry out ACCA and ACVG investigations in accordance with ANSI/NACE SP0502-2010, "Standard Implementation of Direct Pipeline Corrosion Assessment Methods." These investigations can be performed individually or simultaneously and can be used to identify and identify defects in the coating, or to identify short circuits caused by contact with other structures.

Removing the removable foot leaves the full-featured RD8100PDLG pipe and cable locator. Coverage depth and GPS location data are also captured.



## **Simultaneous survey options**

Users select ACVG and ACCA surveys simultaneously or individually.

#### **Ergonomics improvements**

The receiver weighs only 4.9 pounds (2.2 kg), making it easy to use all day long.

#### **Removable feet**

The fully featured premium RD8100 pipe and cable locator remains intact.

#### 1 second mapping measurement

Save time and money.

### **Integrated GPS**

Automatic capture of GPS coordinates on the survey log.

## **Cover depth**

The depth of the pipeline is recorded along with current, voltage and GPS data.

## **Companion Android App**

You can create graphs on the move, including walkback and walk forward.

### PC app

Provides improved graphing tools.

#### peak

Quickly locate the location with the guide arrows and the null arrows check for distortion.

### New TX-25

This small, lightweight transmitter with a rechargeable battery makes it ideal for power distribution networks.

#### TX-150

It sends a 19-mile (30 km) signal for long-distance transmission pipelines.

#### **Enhanced self-test**

Check receiver calibration and give field users a sense of security.

## **eCertificate**

PCM Manager Use PC software to validate and authenticate PCMx receiver calibration.

## **Software and Apps**

Mobile app for Android phones or tablets (data transfer via Bluetooth)

PC app for PC (data transfer via USB)

## PCMx Pipeline Current Mapper Specification

## 1. Product Summary

1.1	Product Overview:	PCMx is a multi-purpose Pipeline Current Mapper and precision locator. With the magnetometer foot attached the PCMx can be used to conduct pipeline coating surveys including ACCA, ACVG and depth of cover. With the foot removed the PCMx is a precision locator with the functionality of an RD8100PDLG
1.2	Product Descriptions:	Pipeline Current Mapper Multi-purpose Pipeline Current Mapper and Precision Locator Cable and Pipe Precision Locator
1.3	Intended Use:	Detecting and pinpointing coating faults on buried pipes and cables Creating survey records of buried pipes and cable locations Locating the position / path, and centerline depth of buried pipes and cables
1.4	Standard Equipment:	Locator including removable magnetometer foot Li-lon rechargeable battery pack and mains charger Quick Start User Guide Mini USB 2.0 compliant data cable

## 2. Performance

2.1	Sensitivity:	2mA at 1 meter (4Hz magnetometer) 5μA at 1 meter (33kHz locate)
2.2	Dynamic range:	140dB RMS/√Hz
2.3	Selectivity:	120dB
2.4	Depth measurement precision1:	± 3% @ 2 meters and ± 5% @ 3 meters
2.5	Locate accuracy:	± 5% of depth
2.6	4Hz current accuracy:	± 5% @ 1 meter depth with 1 Amp
2.7	Active locate filter bandwidth:	± 3Hz, 0 < 1kHz ± 10Hz, ≥1kHz
2.8	Start-up time:	<1 second
2.9	Maximum depth readout <sup>2</sup> :	Metric: Cable / Pipe: 30m Sonde: 20m Imperial: Cable / Pipe: 98' Sonde: 65'