



**VIVAX**  
**METROTECH**

# vLoc3-DM Defect Mapper and Utility Locator



**Locate, fault find and measure the magnitude of  
pipeline coating defects with the  
vLoc3-DM Defect Mapper and Utility Locator**

[www.vxmt.com](http://www.vxmt.com) | [www.vivax-metrotech.com](http://www.vivax-metrotech.com)



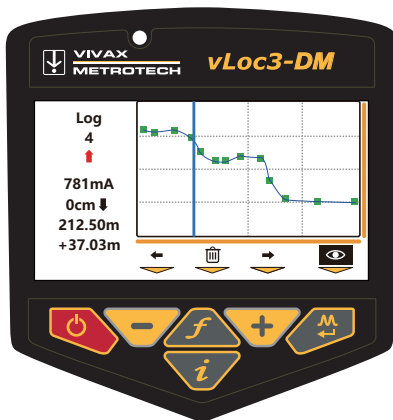
# vLoc3-DM Defect Mapper and Utility Locator

The vLoc3-DM receiver is built on the successful platform of the vLoc3 series receivers with added features suited for pipeline coating integrity surveying. The enhanced omni-directional antenna arrays ensure optimal detection in all locating situations.

Coating defects and damaged isolation joints can quickly be detected using above-ground non-contact techniques. The vLoc3-DM receiver can undertake both Current Gradient and ACVG surveys one at a time or simultaneously drastically reducing the survey time.

The receiver's internal GPS enables the user to generate real-time current gradient graphs and log the data internally or in the cloud. The data points shown in the on-screen graph can be selected and walk backed to for further evaluation or an ACVG A-frame survey.

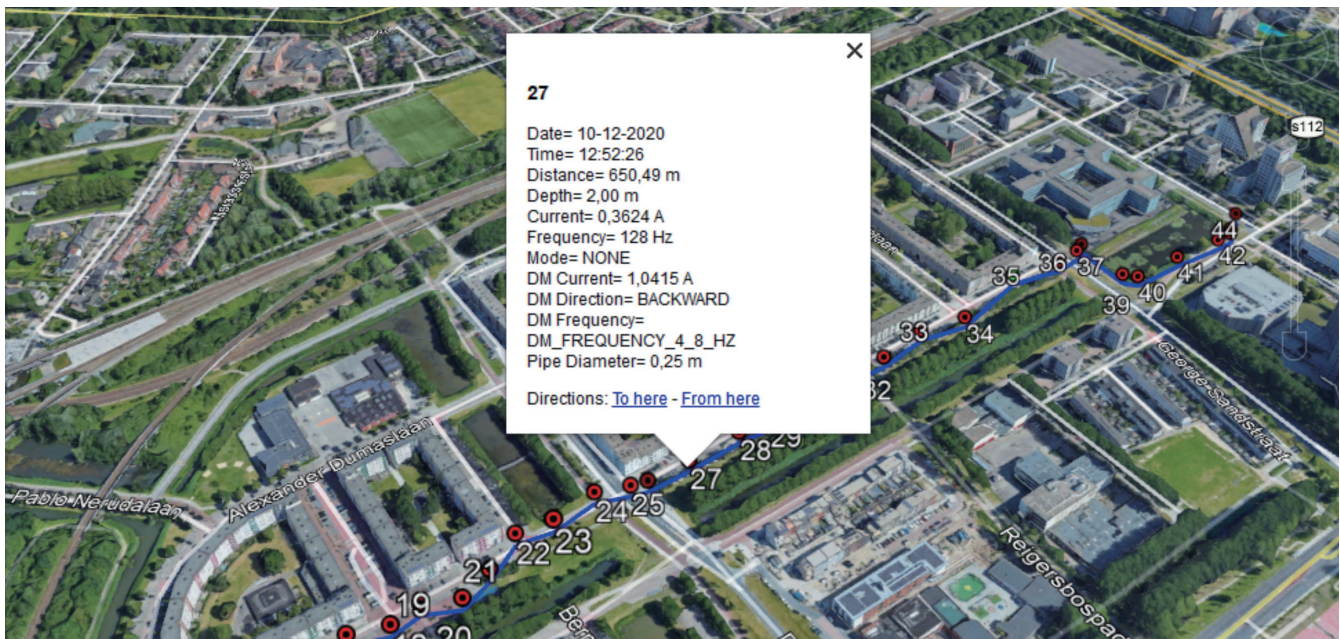
The addition of a new 25-watt battery-operated transmitter makes the vLoc3-DM well equipped to tackle both long-line transmission and local distribution networks.



## vLoc3-DM Data Logging

- 50 million record internal storage
- One-button press to store:
  - Frequency
  - Depth/depth of cover
  - Signal current
  - Low frequency (3 or 4Hz) current
  - GPS location coordinates
  - Distance from last measured point
- Real time analysis of data and updates from the VMMap Cloud Server (requires the VMMap application on a iOS or Andriod smart phone)

Alternatively, retrieve the data via the MyLocator3 free desktop app and export files as txt, .kml, .shp, .xls, .xlsx or .csv files.



# vLoc3-DM Features



Internal Bluetooth and GPS

### Alkaline and Li-ion Batteries

- Alkaline - typically 12 hours of intermittent use
- Li-ion - typically 27 hours of intermittent use

### USB Data Port

- Download data logs
- Update firmware
- Add/remove features

### Accessory Port (plug and play)

- Remote Stethoscope Antenna
- A-Frame Fault & Holiday Locator
- Vehicle Charging Lead

### Antenna Array

- Low-frequency optimization
- Two sets of 3D antennas
- Omni-directional antenna array

### Low Frequency Sensor

When low frequency mapping is not required, the LF Sensor Foot can be removed.



### Ultra Bright LCD

- High visibility 4.3"/10cm LCD
- Auto backlight
- Details configured for pipeline evaluation

### Data Logging

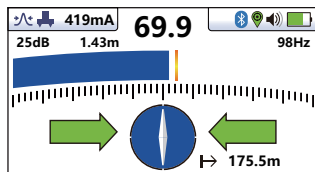
- 50 Million internal record storage
- GPS coordinates and data/time stamps
- Access data via the cloud
- Download data with MyLocator app

### Construction

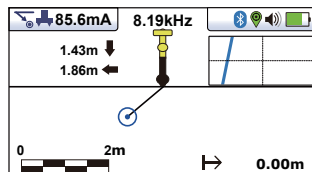
- Ergonomic and lightweight at 4.6 lbs. / 2.1 kg
- IP65 and NEMA 4 rating
- High-impact injection molded housing

# vLoc3-DM Choice of Locate Screens

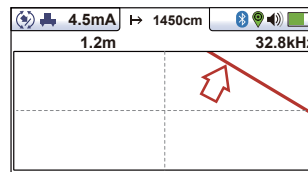
The highly flexible display, combined with the new Omni-directional antenna allows the information to be displayed in a variety of ways ranging from the ever popular **Classic view** to the **Vector cross-sectional view** through the ground (perfect for situations where direct access over the pipe is not possible) or the **Plan view**. For those wishing to analyze the field shape in more detail the **Transverse screen** simultaneously plots both Null and Peak field shape.



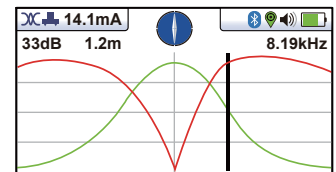
**Classic Screen** - as in previous vLoc locators, with the addition of three color-coded distortion levels



**Vector Locate** - shows orientation, line position, and distance relative to the locator in 3D



**Plan View Screen** - displays the theoretical line in 2D from above ground in omnidirectional mode



**Transverse Plot Screen** - is used to display the peak and null to compare distortion shape

## Warnings and Alerts

Real-time Warning symbols accompanied by an audible sound and vibration in the handle.



**DM current warning** - Will appear in the Info screen when the current change exceeds a predetermined value.



**Signal Overload** - Is usually caused by operating close to power transformers or being close to a transmitter in Induction mode. Moving away from the interfering signal will solve the problem.



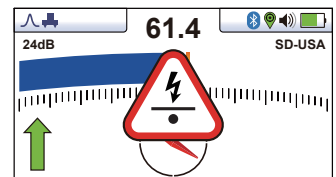
**Shallow Cable** - Alerts indicate that the locator has detected a possibly less than 15cm (5.9-inch) deep cable. Proceed with caution.



**Swing Alert** - Indicates that the operator is swinging the locator excessively resulting in misleading information. When sweeping the locator across the direction of the line, try to keep it vertical, this will improve its accuracy.



**Overhead Cable** - Alerts indicate that the source of the signal is mainly radiating from above. This alert is usually caused by the signal traveling along overhead cables.



# DM Series Transmitters for Distribution & Transmission

The **Loc3-25Tx** is ideally suited to distribution networks. The 25 watt transmitter has selectable direct connection frequencies from 3Hz to 10kHz, fully supporting all frequency modes of the vLoc3-DM. The dot matrix display with LED back light shows output current, connection type, volts, resistance, frequency, volume, battery condition and high voltage warnings. Optional 4"/100mm and 5"/125mm signal clamps are available for the 25-watt transmitter.

The 25 watt transmitter is powered by its Li-ion battery tray or by a 12V – 19V DC source making it a truly portable transmitter. Packaged in a lightweight, rugged and ergonomic IP65 housing, the transmitter provides consistent current output in direct connect and protection against incoming voltages up to 240V. When used with the vLoc3-DM Receiver the Loc3-25Tx is ideal for:

- Local distribution pipeline location and mapping
- Location of defective isolation joints
- Detection of coating faults/shorts with third-party utilities/structures
- Mapping of CP current distribution

**Loc-150Tx.** The 150 Watt output power of this transmitter makes it ideal for long line transmission pipelines. Locate and survey signals are applied at CP stations or test posts. The transmitter can transmit a locate signal typically at distances up to 20miles/32km in order to undertake Current Gradient and ACVG surveys or to locate the position and depth of cover on the pipe. The transmitter is designed to be powered from CP stations, AC or external batteries.

### Powered by:

- CP Rectifier (nominally 26V - 60V DC)
- 100 – 250V AC mains power (max 4A)
- 12-24VDC external supply or higher (vehicle or truck batteries)



Transmitter Clamp



Loc-25Tx  
25-Watt Transmitter

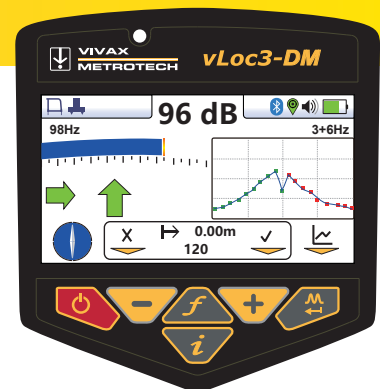


Loc-150Tx  
150-Watt Transmitter

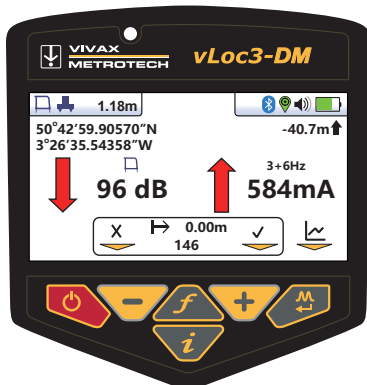
# DM A-Frame ACVG and Fault Locator

The **DM A-Frame** screen provides not only the fault or holiday location information, but also shows pipeline position information ensuring the survey is kept on track:

- Compass with utility orientation
- Bar graph with signal strength from the utility
- Left/right arrows showing location of the utility
- One-button press datalogging
- Graph of the last 20 a-frame readings
- The distance from the last logged DM current



Selecting Simultaneous mode allows both Current attenuation and ACVG surveys to be undertaken at the same time.



Carbon fiber reinforced A Frame ensures reliable operation in the harshest of conditions.

# MyLocator3 Software management tool

Use the free MyLocator3 desktop app to manage stored data and use to configure features such as which modes or frequencies the user has access to and creating custom startup screens.



MyLocator3

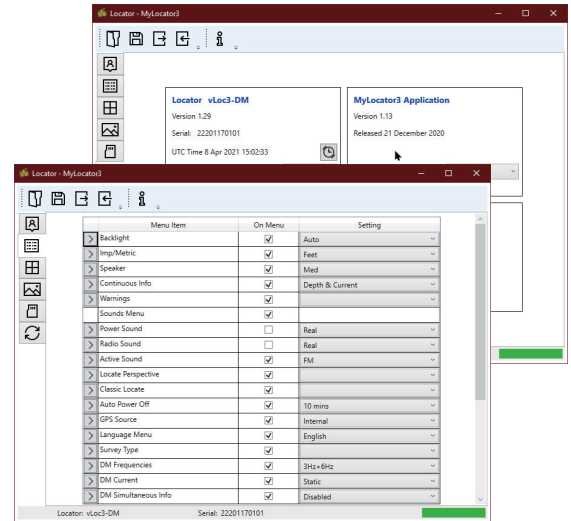
Data transfer – The MyLocator3 app will download the data collected from the locator including timestamps, GPS coordinates, depth measurements, current on the line and notes entered at the time of locate.

**Export Data** files as .txt, .kml, .xls, .xlsx or .csv files

**Free Lifetime Software updates** – The free MyLocator3 desktop app checks for locator software updates and app software updates whenever connected to the Internet via the USB interface.

**Personalize** – Add owner/user information, a background picture or logo, or a short message to the startup screen.

**Lock Feature** – The locator’s configurations and settings can be locked, enabling equipment or safety officers to ensure that features selected or removed by management cannot be overridden by the user (requires optional lockout dongle).



# VMap Utility Mapping and Cloud Storage

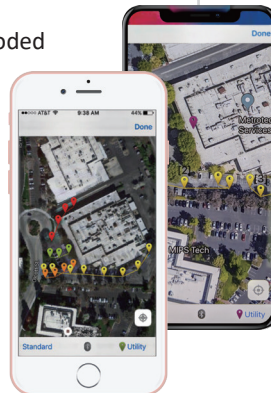
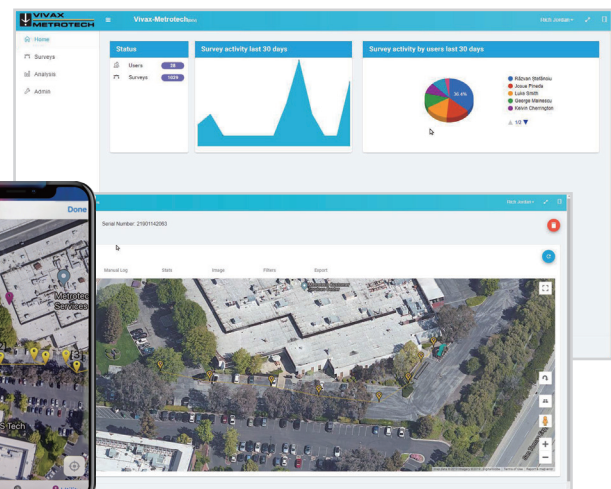
When used with the vLoc series receivers the VMap Utility Mapping app records data from the field which is instantly available in the web portal. Field technicians using a vLoc series receiver can capture depth readings, GPS coordinates, distance between locates and more. All this data will be sent to the cloud where it can be accessed through the VMap Web Portal. The VMap app generates maps in real time giving confidence to the field technician that the data being collected is accurate. Location data is obtained from the mobile phone, the locators GPS or an external GPS device of your choice.

The image capture feature in the app allows the user to attach a JPEG format image to the survey. This is useful to add points of interest or a snapshot of the completed survey. The data in the web portal is compatible with Google Maps, Asset Management and GIS software.



VMap & Web Portal

- Uses both Google and Apple Maps
- Low and high GPS accuracy settings
- Plug-and-play Bluetooth pairing to receivers
- Export to a .kml file for use with popular GIS programs
- Compatible with Google Maps, Asset Management and GIS software
- Show multiple utilities on one map with color coded utility drop pins



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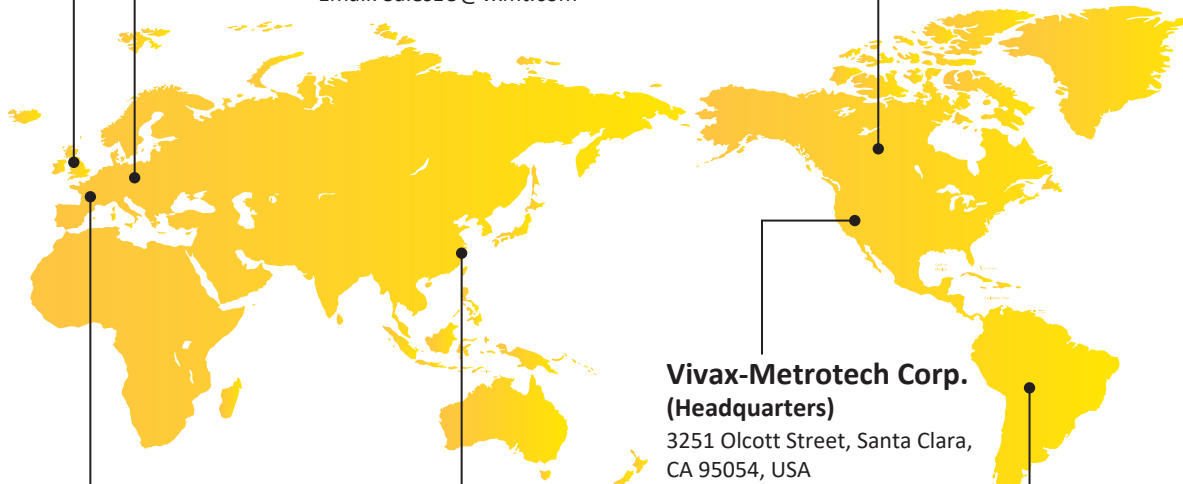
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V1.0 (May 2021)