



**VIVAX**  
**METROTECH**

# vLoc3-9800

Technical Specifications V1.8



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## A. Description and Typical Applications

Item	Parameter
Model Name	vLoc3-9800
Model Number	VX221-01
Description	Multi-purpose precision utility locator receiver
Intended Use	Locating & pinpointing the position of buried pipes, cables, and sondes

## B. Characteristics

Item	Parameter
Construction	High-impact thermoplastic (ABS) injection molded housing
Weight	4.4lbs (2kg)
Dimensions	12.6in(L) x 8.6in(W) x 26.6in(H) (321mm x 219mm x 676mm)
Display Type	High-Visibility Color Display, 4.3"/10cm with 480 x 272 resolution
Receiver Antennas	<ul style="list-style-type: none"> <li>- One Upper Horizontal Guidance Antenna</li> <li>- One Left Displacement Antenna</li> <li>- One Right Displacement Antenna</li> <li>- One Compass Antenna</li> </ul>
Batteries	<ul style="list-style-type: none"> <li>- Six x AA Alkaline batteries</li> <li>- Rechargeable custom Lithium-ion batteries with 100-240V AC mains charger</li> </ul>
Battery Life	<ul style="list-style-type: none"> <li>- Alkaline – typically 12 hours of intermittent use at 70°F (21°C)</li> <li>- Lithium-ion – typically 27 hours of continuous use at 70°F (21°C)</li> </ul> <p>* With backlight activated, Battery life varies with temperature; re-charging cycles are approximately 500 times the life cycle.</p>
Environmental	IP65
External Connectors	<ul style="list-style-type: none"> <li>- Accessory Socket – to charge the internal batteries and attach accessories</li> <li>- Mini USB socket for data transfer and software updates</li> </ul>
Temperature Range	<ul style="list-style-type: none"> <li>- Operating: -4°F to 122°F (-20°C to 50°C)</li> <li>- Storage: -40°F to 140°F (-40°C to 60°C)</li> </ul>
Compliance and Approvals	<ul style="list-style-type: none"> <li>- Complies with European standard CE (Directive 99/5/EC) <ul style="list-style-type: none"> <li>• EN 55011</li> <li>• EN 61000-4-2: A1 &amp; A2</li> </ul> </li> <li>- Complies with FCC Rules Part 15 <ul style="list-style-type: none"> <li>• CFR 47 part 2</li> <li>• CFR 47 Part 15</li> </ul> </li> </ul>

	<ul style="list-style-type: none"> <li>• EN 61000-4-3</li> <li>• EN 61000-4-8: A1</li> <li>• ETSI EN 300 330-2</li> <li>• ETSI EN 301 489-1</li> <li>• ETSI EN 301 489-3</li> </ul>	
<b>Manufacturing</b>	Designed and manufactured per ISO 9001:2015	
<b>What's In the Box</b>	<ul style="list-style-type: none"> <li>- vLoc3-9800 Receiver</li> <li>- USB data cable</li> <li>- Custom Lithium-ion battery pack</li> </ul>	<ul style="list-style-type: none"> <li>- 100-240V AC mains charger</li> <li>- Alkaline battery holder</li> <li>- User handbook</li> </ul>
<b>Compatible Accessories</b>	<ul style="list-style-type: none"> <li>- A-frame fault locator</li> <li>- Remote Antenna (Stethoscope)</li> <li>- Vehicle Charging Lead</li> <li>- External GPS Module</li> </ul>	<ul style="list-style-type: none"> <li>- Range of Sondes (waterproof, self-contained transmitters for use in nonmetallic pipes &amp; ducts)</li> </ul>

## C. Operational

Item	Parameter
<b>Information Displayed</b>	<p><b>Status Bar Information:</b></p> <ul style="list-style-type: none"> <li>- Antenna configuration: Peak, Sonde, Auto or Manual</li> <li>- Line location - depth &amp; current measurement</li> <li>- Battery condition</li> <li>- Speaker volume</li> <li>- Bluetooth</li> <li>- WiFi Connection</li> <li>- Radio link to transmitter status (if installed)</li> </ul> <p><b>Locate screen (Classic display):</b></p> <ul style="list-style-type: none"> <li>- Left/Right Locate Screen</li> <li>- Peak Locate Screen</li> <li>- Signal strength - numeric value</li> <li>- Compass: full 360°-line direction indicator</li> <li>- Gain level (in dB) if in Manual mode</li> <li>- Frequency selected</li> <li>- Depth and current</li> <li>- Warnings (if activated)</li> <li>- Plug and play automatic recognition of accessories</li> <li>- Accessory specific custom screens</li> </ul>

	<p><b>Information screen:</b></p> <ul style="list-style-type: none"> <li>- GPS coordinates</li> <li>- Signal current and depth value</li> <li>- Log number</li> </ul> <p><b>Sonde Locate Screen:</b></p> <ul style="list-style-type: none"> <li>- Peak curtain-style bar graph showing signal strength</li> <li>- Continuous depth reading to the sonde</li> </ul> <p><b>Customer definable start-up screen</b></p>
<p><b>Locate Perspectives</b></p>	<ul style="list-style-type: none"> <li>- Classic Locate</li> <li>- Sonde Locate Screen</li> </ul>
<p><b>Configuration</b></p>	<ul style="list-style-type: none"> <li>- Intuitive setup menu enables the user to configure:             <ul style="list-style-type: none"> <li>• Set up frequency selection to toggle by "<b>f</b>" pushbutton</li> <li>• Setup location mode selection to toggle by "<b>m</b>" pushbutton</li> <li>• Units of measure (feet/meter)</li> <li>• Language</li> <li>• Continuous depth/current options</li> <li>• Loudspeaker level</li> <li>• Backlight: Low, Medium, High or Auto</li> <li>• Bluetooth pairing</li> <li>• WiFi Connection</li> <li>• Transmitter Radio Link (Tx-Link) if installed</li> <li>• Auto shut down – configurable for five minutes, ten minutes or never</li> </ul> </li> </ul>
<p><b>Data Logging</b></p>	<ul style="list-style-type: none"> <li>- 50 Million record storage</li> <li>- All parameters stored at each location, including depth, current, mode, gain setting, frequency, locate uncertainty, longitude, latitude, and height above sea level</li> <li>- If connected to GPS (via Bluetooth), data is also recorded with coordinates and date-time</li> </ul>
<p><b>Data Transfer</b></p>	<p>Via the Vivax-Metrotech "MyLocator3" software application free from the Vivax-Metrotech website. Data can be saved in csv, klm, shp, txt, xls and xlsx formats. The transfer is via a USB cable connection from the locator to the host computer.</p> <p><b>Or</b></p> <ul style="list-style-type: none"> <li>- Cellular transfer via the cloud using Vivax-Metrotech application software, VMMap</li> </ul>
<p><b>Operating Frequencies</b></p>	<ul style="list-style-type: none"> <li>- Configurable frequencies from 98Hz to 131kHz</li> <li>- Power - 50Hz and 60Hz</li> <li>- Radio – 10.0kHz - 22.7kHz bandwidth</li> <li>- Sonde - 512Hz, 640Hz, 9.82kHz, 32.8kHz, and 83.1kHz</li> </ul>
<p><b>Operating Modes</b></p>	<ul style="list-style-type: none"> <li>- Classic locate left/right indication</li> </ul>

	<ul style="list-style-type: none"> <li>- Peak Locate</li> <li>- Sonde locate</li> </ul>								
<b>Gain Control</b>	<p>Automatic Gain Control</p> <p>Manual gain using + or -</p> <p>One touch of + or - keys rescales to 60% of FSD</p>								
<b>Accuracy</b>	<table border="1"> <tr> <td>Locate pinpointing accuracy:</td> <td> <ul style="list-style-type: none"> <li>- Up to 9ft (3m) – 3% of the depth</li> <li>- Over 9ft (3m) – 5% of the depth</li> </ul> </td> </tr> <tr> <td>Depth measurement accuracy:</td> <td>+/- 5% of the depth</td> </tr> <tr> <td>Current measurement accuracy:</td> <td> <ul style="list-style-type: none"> <li>- 3% of actual current –up to 9ft (3m)</li> <li>- 5% of actual current –over 9ft (3m)</li> </ul> </td> </tr> <tr> <td>Depth range:</td> <td>- Dependent on the strength of the signal radiating to the locator</td> </tr> </table>	Locate pinpointing accuracy:	<ul style="list-style-type: none"> <li>- Up to 9ft (3m) – 3% of the depth</li> <li>- Over 9ft (3m) – 5% of the depth</li> </ul>	Depth measurement accuracy:	+/- 5% of the depth	Current measurement accuracy:	<ul style="list-style-type: none"> <li>- 3% of actual current –up to 9ft (3m)</li> <li>- 5% of actual current –over 9ft (3m)</li> </ul>	Depth range:	- Dependent on the strength of the signal radiating to the locator
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	Current measurement accuracy:	<ul style="list-style-type: none"> <li>- 3% of actual current –up to 9ft (3m)</li> <li>- 5% of actual current –over 9ft (3m)</li> </ul>							
	Depth range:	- Dependent on the strength of the signal radiating to the locator							
Performance rated using a single undistorted signal source									
<b>Compatible Transmitters</b>	Loc series, Loc3 series, VM-550FF								

## D. Shipping and Packaging

Item	Parameter
Shipping Weight	10.2lbs (4.61kg)
Shipping Dimension	16.5in(L) x 11in(W) x 27.6in(H) (420mm x 280mm x 700mm)

## E. Warranty

Item	Parameter
Warranty	<p>Two years</p> <p>Optional extended warranty available</p>

## F. Software Updates

Item	Parameter
Software	The software can be upgraded using a PC with a USB port. Program updates & locator software updates are available via the free MyLocator3 app.

**Disclaimer:** Product and accessory specification and availability information are subject to change without prior notice.