



**VIVAX**  
**METROTECH**

# Loc3-5Tx

Technical Specifications V1.5



**VIVAX**  
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## A. Typical Applications

Item	Parameter
Description	Pipe & cable locator transmitter
Designed Use	<ul style="list-style-type: none"> <li>- Transmitting active signals for the location of buried pipes and cables</li> <li>- Transmitting a fault-find frequency for the detection of cable faults</li> </ul>

## B. Characteristics

Item	Parameter									
Construction	High-impact ABS plastic									
Weight	<ul style="list-style-type: none"> <li>- With Alkaline battery tray: 8.6lbs (3.9kg)</li> <li>- With Rechargeable battery tray: 7.15lbs (3.24kg)</li> </ul>									
Dimensions	13.1in(L) x 7.2in(W) x 7.3in(H) (332mm x 182mm x 185mm)									
Display Type	<ul style="list-style-type: none"> <li>- Monochrome-dot-matrix graphic LCD display with LED backlight</li> <li>- 2.4in x 1.3in (60mm x 32mm)</li> </ul>									
Power Options	<ul style="list-style-type: none"> <li>- 8 x alkaline "D" cells</li> <li>- 12~22V external DC power</li> <li>- Optional Li-Ion rechargeable battery pack – 18V</li> </ul>									
Battery Life	<table border="0" style="width: 100%;"> <thead> <tr> <th style="text-align: left;">Output Power</th> <th style="text-align: left;">Alkaline</th> <th style="text-align: left;">Li-Ion (Rechargeable)</th> </tr> </thead> <tbody> <tr> <td>1-watt</td> <td>25 hours</td> <td>50 hours</td> </tr> <tr> <td>5-watt</td> <td>4 hours</td> <td>10 hours</td> </tr> </tbody> </table> <p><i>At 70°F (21°C) - continuous use (based on the battery type and quality)</i></p> <p><i>Li-Ion batteries will withstand 500 charging life cycles</i></p>	Output Power	Alkaline	Li-Ion (Rechargeable)	1-watt	25 hours	50 hours	5-watt	4 hours	10 hours
Output Power	Alkaline	Li-Ion (Rechargeable)								
1-watt	25 hours	50 hours								
5-watt	4 hours	10 hours								
Environmental	IP54 and NEMA 4									
External Connectors	<ul style="list-style-type: none"> <li>- 1 x 3 pin connection socket (XLR)</li> <li>- 1 x fuse (output protection) 1.6A/250V</li> <li>- 1 x Mini-USB socket</li> <li>- 1 x socket for battery charger &amp; 12V DC power in</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/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> </ul> </li> </ul>									

	<ul style="list-style-type: none"> <li>• EN 61000-4-2: A1 &amp; A2</li> <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> <li>- Complies with FCC rules part 15</li> <li>• CFR 47 part 2</li> <li>• CFR 47 part 15</li> </ul>
<b>Standard Accessories (Supplied with Transmitter)</b>	<ul style="list-style-type: none"> <li>- Direct Connection Leads (XLR plug with 10ft (3.5m) red/black leads)</li> <li>- Ground stake</li> <li>- Alkaline battery tray</li> <li>- 8 x D Cell alkaline batteries</li> </ul>
<b>Compatible Accessories Options</b>	<ul style="list-style-type: none"> <li>- 2in (50mm) transmitter clamp</li> <li>- 4in (100mm) transmitter clamp</li> <li>- 5in (125mm) transmitter clamp</li> <li>- 18-inch (450mm) flexible transmitter clamp</li> <li>- LPC Separation Filter (to connect and use the transmitter on lines carrying up to 240V AC)</li> <li>- LCC Live Cable Connector (to connect and use the transmitter on lines carrying up to 480V AC)</li> <li>- Rechargeable battery tray – Custom Li-Ion battery tray and charger (input DC12V 3A, output DC18V-93.6 Wh)</li> <li>- 12V DC vehicle power lead for powering and charging the optional rechargeable battery from a vehicle</li> <li>- 100-240V AC power supply for powering and charging the optional rechargeable battery from a mains power supply</li> </ul>

## C. Operational

Item	Parameter
Information Displayed	<ul style="list-style-type: none"> <li>- Current (numeric)</li> <li>- Volts</li> <li>- Resistance</li> <li>- Frequency of output signal</li> <li>- High voltage warning if volts online exceed 30V AC</li> <li>- Beeper volume (three levels &amp; off)</li> </ul>

	<ul style="list-style-type: none"> <li>- Battery condition icon</li> <li>- Bar graph showing the proportion of successfully applied signal</li> <li>- Animation icon confirming connection mode (Induction, Direct connection, Clamp)</li> <li>- TX-RX control connection status (if fitted)</li> </ul>
<b>Transmitting Modes</b>	<ul style="list-style-type: none"> <li>- <b>Induction mode</b> – applies signal inductively using the internal antenna</li> <li>- <b>Direct connection mode</b> - applies signal directly to the cable by clipping one output lead to the cable, the other to an independent ground</li> <li>- <b>Clamp mode</b> – applies signal using an inductive clamp (aka toroid or coupler) that is placed around the target pipe or cable</li> </ul> <p>* Modes are automatically selected when accessories are plugged in. The default mode (no accessories) is Induction.</p>

## Transmitting Frequency by Mode

<b>Induction Mode</b>	Multiple induction frequencies between 8.19 kHz and 200 kHz
<b>Direct Connection Mode</b>	Available frequencies between 98Hz and 200 kHz with default frequencies of 512Hz, 8.19 kHz, 33 kHz, 65 kHz, 200 kHz
<b>Clamp Mode</b>	Available frequencies between 8.19 kHz and 200 kHz with default frequencies of 8.19 kHz, 33 kHz, 65 kHz, and 200 kHz
<b>Transmitting Mode Power Output</b>	<p>In accordance with FCC part 15:</p> <ul style="list-style-type: none"> <li>- <i>Frequencies under 45 kHz - 5 watts</i></li> <li>- <i>Frequencies over 45 kHz - 1 watt</i></li> </ul>
<b>Maximum Output Voltage</b>	50V RMS
<b>Maximum Output Current</b>	0.3A RMS constant current
<b>Output Protection</b>	Output protected against accidental momentary connection to up to 240V AC
<b>Audio Indication</b>	<ul style="list-style-type: none"> <li>- Connection quality – Increased beep rate indicates a better-applied signal</li> <li>- Beeps to confirm the selected action</li> </ul>
<b>Controls</b>	<ul style="list-style-type: none"> <li>- Use pushbuttons to select: <ul style="list-style-type: none"> <li>• On/Off</li> <li>• Frequency</li> <li>• Output level</li> <li>• Information (volts &amp; resistance) / Setting (volume, frequency &amp; multi-mode)</li> </ul> </li> </ul>
<b>Compatible Receivers</b>	vLoc3 series, vLoc 2 series, vLoc series, VM-510FFL+

## D. Rechargeable Battery Tray (optional accessory)

Item	Parameter
<b>Description</b>	Optional Li-Ion rechargeable battery tray with charger for Loc3 series transmitters
<b>Input/output</b>	<ul style="list-style-type: none"> <li>- Input DC 12V 3A</li> <li>- Output DC 18V-93.6 Wh</li> </ul>
<b>Battery Type</b>	Li-Ion battery
<b>Temperature Range</b>	<ul style="list-style-type: none"> <li>- Operating: 14°F to 140°F (-10°C to 60°C)</li> <li>- Storage: -4°F to 140°F (-20°C to 60°C)</li> <li>- Charging: 32°F to 113°F (0°C to 45°C)</li> </ul>
<b>Storage humidity</b>	≤75% RH
<b>Weight</b>	<ul style="list-style-type: none"> <li>- Battery Tray: 3.31lbs. (1.5kg)</li> <li>- Transmitter with battery tray: 7.1lbs. (3.2kg)</li> </ul>
<b>Dimension</b>	13.1in(L) x 7.2in(W) x 2.9in(H) (332mm x 182mm x 73mm)
<b>Shipping Weight</b>	4.6lbs (2.1kg) (Battery Tray)
<b>Shipping Dimension</b>	16.1in(L) x 10.2in(W) x 6.7in(H) (410mm x 260mm x 170mm)
<b>Warranty</b>	One Year

## E. Shipping and Packaging

Item	Parameter
<b>Shipping Weight</b>	<ul style="list-style-type: none"> <li>- With alkaline battery tray: 13.9lbs. (6.3kg)</li> <li>- With rechargeable battery tray: 12.3lbs. (5.6kg)</li> </ul>
<b>Shipping Dimension</b>	15.7in(L) x 11.8in(W) x 8.7in(H) (400mm x 300mm x 220mm)

## F. Warranty

Item	Parameter
<b>Warranty</b>	<ul style="list-style-type: none"> <li>- Two years (Transmitter with alkaline battery tray)</li> <li>- Extended warranty available</li> </ul>

All products are designed and manufactured per ISO 9001:2015.

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