



**VIVAX**  
**METROTECH**

# Loc3-5Tx, 5-Watt Transmitter

Technical Specifications V1.8



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### A. Description and Typical Applications

Item	Parameter
Model Name	Loc3-5Tx
Model Number	VX219-05
Description	5-Watt 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) x7.3in(H) (332mm x 182mm x 185mm)									
Display Type	<ul style="list-style-type: none"> <li>- Monochrome-dot-matrix graphic LCD 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 tray</li> </ul>									
Battery Life	<table border="1"> <thead> <tr> <th>Output Power</th> <th>Alkaline</th> <th>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>* Continuous use at 70°F (21°C) with the backlight activated. The battery life varies with temperature, battery type and quality. Recharging cycles are approximately 500 times the life cycle.</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 speakON® socket for clamps and connection leads</li> <li>- 1 x Mini-USB socket for firmware updates</li> <li>- 1 x socket for battery charger &amp; 12V DC power in</li> <li>- 1 x fuse socket (output protection) with 1.6A/250V fuse</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>									

<b>Compliance/Approvals</b>	<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> <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> </li> </ul>	<ul style="list-style-type: none"> <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>
<b>Manufacturing</b>	Designed and manufactured per ISO 9001:2015	
<b>What's In the Box</b>	<ul style="list-style-type: none"> <li>- Loc3-5Tx Transmitter</li> <li>- Direct Connection Leads (10ft (3.5m) with red and black leads and clips)</li> <li>- Mini-USB lead for firmware updates</li> <li>- Ground stake</li> <li>- Alkaline battery tray</li> <li>- 8 x D Cell alkaline batteries (not available in all regions)</li> </ul>	
<b>Compatible Accessories</b>	<ul style="list-style-type: none"> <li>- 2-inch (50mm) transmitter clamp</li> <li>- 4-inch (100mm) transmitter clamp</li> <li>- 5-inch (125mm) transmitter clamp</li> <li>- 9-inch (230mm) transmitter clamp</li> <li>- 18-inch (450mm) flexible transmitter clamp</li> <li>- Ground Extension Spool</li> <li>- Connection leads with Telco or heavy-duty clips</li> <li>- Live Plug Connector (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>- Backpack</li> <li>- Carry Bag</li> <li>- Adapter, 3-Pin XLR to speakON® for clamps and connection leads</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> <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-Link status (if installed)</li> </ul>
Transmitting Modes	<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

Induction Mode	Multiple induction frequencies between 8.19 kHz and 200 kHz
Direct Connection Mode	Available frequencies between 98Hz and 200 kHz with default frequencies of 512Hz, 8.19 kHz, 33 kHz, 65 kHz, 200 kHz
Clamp Mode	Available frequencies between 8.19 kHz and 200 kHz with default frequencies of 8.19 kHz, 33 kHz, 65 kHz, and 200 kHz
Transmitting Mode Power Output	<p><b>In accordance with FCC part 15:</b></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>
Maximum Output Voltage	50V RMS
Maximum Output Current	0.3A RMS constant current
Output Protection	Output protected against accidental momentary connection to up to 240V AC
Audio Indication	<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
Warranty	<ul style="list-style-type: none"><li>- Two years (Transmitter with alkaline battery tray)</li><li>- Extended warranty available</li></ul>

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