



VIVAX
METROTECH

Loc3-5Tx

Technical Specifications V1.5



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A. Typical Applications

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

B. Characteristics

| Item | Parameter | | | | | | | | | |
|-----------------------------|--|-----------------------|----------|-----------------------|--------|----------|----------|--------|---------|----------|
| Construction | High-impact ABS plastic | | | | | | | | | |
| Weight | <ul style="list-style-type: none"> - With Alkaline battery tray: 8.6lbs (3.9kg) - With Rechargeable battery tray: 7.15lbs (3.24kg) | | | | | | | | | |
| 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"> - Monochrome-dot-matrix graphic LCD display with LED backlight - 2.4in x 1.3in (60mm x 32mm) | | | | | | | | | |
| Power Options | <ul style="list-style-type: none"> - 8 x alkaline "D" cells - 12~22V external DC power - Optional Li-Ion rechargeable battery pack – 18V | | | | | | | | | |
| 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"> - 1 x 3 pin connection socket (XLR) - 1 x fuse (output protection) 1.6A/250V - 1 x Mini-USB socket - 1 x socket for battery charger & 12V DC power in | | | | | | | | | |
| Temperature Range | <ul style="list-style-type: none"> - Operating: -4°F to 122°F (-20°C to 50°C) - Storage: -40°F to 140°F (-40°C to 60°C) | | | | | | | | | |
| Compliance/Approvals | <ul style="list-style-type: none"> - Complies with European standard CE (Directive 99/5/EC) <ul style="list-style-type: none"> • EN 55011 | | | | | | | | | |

| | |
|---|--|
| | <ul style="list-style-type: none"> • EN 61000-4-2: A1 & A2 • EN 61000-4-3 • EN 61000-4-8: A1 • ETSI EN 300 330-2 • ETSI EN 301 489-1 • ETSI EN 301 489-3 - Complies with FCC rules part 15 • CFR 47 part 2 • CFR 47 part 15 |
| Standard Accessories (Supplied with Transmitter) | <ul style="list-style-type: none"> - Direct Connection Leads (XLR plug with 10ft (3.5m) red/black leads) - Ground stake - Alkaline battery tray - 8 x D Cell alkaline batteries |
| Compatible Accessories Options | <ul style="list-style-type: none"> - 2in (50mm) transmitter clamp - 4in (100mm) transmitter clamp - 5in (125mm) transmitter clamp - 18-inch (450mm) flexible transmitter clamp - LPC Separation Filter (to connect and use the transmitter on lines carrying up to 240V AC) - LCC Live Cable Connector (to connect and use the transmitter on lines carrying up to 480V AC) - Rechargeable battery tray – Custom Li-Ion battery tray and charger (input DC12V 3A, output DC18V-93.6 Wh) - 12V DC vehicle power lead for powering and charging the optional rechargeable battery from a vehicle - 100-240V AC power supply for powering and charging the optional rechargeable battery from a mains power supply |

C. Operational

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

| | |
|---------------------------|---|
| | <ul style="list-style-type: none"> - Battery condition icon - Bar graph showing the proportion of successfully applied signal - Animation icon confirming connection mode (Induction, Direct connection, Clamp) - TX-RX control connection status (if fitted) |
| Transmitting Modes | <ul style="list-style-type: none"> - Induction mode – applies signal inductively using the internal antenna - Direct connection mode - applies signal directly to the cable by clipping one output lead to the cable, the other to an independent ground - Clamp mode – applies signal using an inductive clamp (aka toroid or coupler) that is placed around the target pipe or cable <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 | In accordance with FCC part 15: <ul style="list-style-type: none"> - <i>Frequencies under 45 kHz - 5 watts</i> - <i>Frequencies over 45 kHz - 1 watt</i> |
| 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"> - Connection quality – Increased beep rate indicates a better-applied signal - Beeps to confirm the selected action |
| Controls | <ul style="list-style-type: none"> - Use pushbuttons to select: <ul style="list-style-type: none"> • On/Off • Frequency • Output level • Information (volts & resistance) / Setting (volume, frequency & multi-mode) |
| Compatible Receivers | vLoc3 series, vLoc 2 series, vLoc series, VM-510FFL+ |

D. Rechargeable Battery Tray (optional accessory)

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

E. Shipping and Packaging

| Item | Parameter |
|---------------------------|--|
| Shipping Weight | <ul style="list-style-type: none"> - With alkaline battery tray: 13.9lbs. (6.3kg) - With rechargeable battery tray: 12.3lbs. (5.6kg) |
| Shipping Dimension | 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"> - Two years (Transmitter with alkaline battery tray) - Extended warranty available |

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.