

VIVAX
METROTECH

Loc3-10Tx

Technical Specifications V1.3



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A. Typical Applications

Item	Parameter
Description	- Pipe & cable locator transmitter
Designed Use	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	With Alkaline battery tray: 9.9lbs (4.4kg) With Rechargeable battery tray: 7.15lbs (3.24kg)												
Dimensions	13.1in(L) x 7.2in(W) x7.3in(H) (332mm x 182mm x 185mm)												
Display Type	- Monochrome-dot-matrix graphic LCD display with LED backlight - 2.4in x 1.3in (60mm x 32mm)												
Power Options	- 12 x alkaline “D” cells - 12~22V external DC power - Optional Li-Ion rechargeable battery pack – 18V												
Battery Life	<table><tr><th>Output Power</th><th>Alkaline</th><th>Li-Ion (Rechargeable)</th></tr><tr><td>1 watt</td><td>25 hours</td><td>50 hours</td></tr><tr><td>5 watt</td><td>6 hours</td><td>10 hours</td></tr><tr><td>10 watt</td><td>4-5 hours</td><td>6 hours</td></tr></table> At 70°F (21°C) - continuous use (based on the battery type and quality) Li-Ion batteries will withstand 500 charging life cycles	Output Power	Alkaline	Li-Ion (Rechargeable)	1 watt	25 hours	50 hours	5 watt	6 hours	10 hours	10 watt	4-5 hours	6 hours
Output Power	Alkaline	Li-Ion (Rechargeable)											
1 watt	25 hours	50 hours											
5 watt	6 hours	10 hours											
10 watt	4-5 hours	6 hours											
Environmental	- IP54 and NEMA 4												
External Connectors	- 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	Operating: -4°F to 122°F (-20°C to 50°C) Storage: -40°F to 140°F (-40°C to 60°C)												
Compliance/Approvals	- Complies with European standard CE (Directive 99/5/EC)												

	• EN 55011 • 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)	- Direct Connection Leads (XLR plug with 10ft (3.5m) red/black leads) - Ground stake - Alkaline battery tray - 12 x D Cell alkaline batteries - Soft carry bag
Compatible Accessories Options	- 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 transmitter on lines carrying up to 240V AC) - LCC Live Cable Connector (to connect and use 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	- Current (numeric) - Volts - Resistance - Frequency of output signal

	- High voltage warning if volts online exceed 30V AC - Beeper volume (three levels & off) - Battery condition icon - Bar graph showing proportion of signal successfully applied - Animation icon confirming connection mode (Induction, Direct connection, Clamp) - TX-RX control connection status (if fitted)
Transmitting Modes	- Induction mode – applies signal inductively using 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 * Modes are selected automatically when accessories are plugged in. The default mode (no accessories) is Induction.
Transmitting Frequency by Mode	
Induction Mode	Multiple induction frequencies between 8.19 kHz and 200 kHz. * Vivax-Metrotech reserves the right to change this list.
Direct Connection Mode	Available frequencies between 98Hz and 200 kHz with default frequencies in: 512Hz, 8.19 kHz, 33 kHz, 65 kHz, 200 kHz.
Clamp Mode	Available frequencies between 8.19 kHz and 200 kHz with default frequencies in: 8.19 kHz, 33 kHz, 65 kHz, and 200 kHz.
Transmitting Mode Power Output	In accordance with FCC part 15: - <i>Frequencies under 45 kHz - 10 watts</i> - <i>Frequencies over 45 kHz - 1 watt</i>
Maximum Output Voltage	50V RMS
Maximum Output Current	5A RMS constant current
Output Protection	Output protected against accidental momentary connection to up to 240V AC
Audio Indication	- Connection quality – Increased beep rate indicates a better-applied signal - Beep to confirm action
Controls	- Use pushbuttons to select: • On/Off • Frequency • Output level

	Information (volts & resistance) / Setting (volume, frequency & multi-mode)
Compatible Receivers	vLoc3 series, vLocPro-2 series, vLocPro series, VM-510FFL+

D. Rechargeable Batteries Pack Accessory

Item	Parameter
Description	Loc3-10Tx Transmitter optional Li-Ion rechargeable battery tray with charger
Input/Output	Input DC12V 3A Output DC18V-93.6 Wh
Battery Type	Li-Ion battery
Temperature Range	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	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 Years

E. Shipping and Packaging

Item	Parameter
Shipping Weight	With alkaline battery tray: 15lbs. (6.8kg) 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	Two years (Transmitter with alkaline battery tray)

	Extended warranty available
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All products are designed and manufactured in accordance with ISO 9001:2008.

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