



VIVAX
METROTECH

Loc3-25Tx Transmitter

Technical Specifications V1.0



VIVAX
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A. Typical Applications

Item	Parameter
Description	Low-Frequency transmitter for buried utility locating and pipeline defect mapping
Designed Use	<ul style="list-style-type: none"> - Long-distance pipeline location - Transmitting active signals for the location of buried pipes and cables - Transmitting active signals for the location of coating defects on buried pipes

B. Characteristics

Item	Parameter									
Construction	High-impact ABS plastic									
Weight	7.05lbs (3.19kg)									
Dimension	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 Supply	<ul style="list-style-type: none"> - Li-Ion rechargeable battery tray with AC to DC adapter (Optional 12 x D Cell Alkaline battery tray (output limited to 10W)) 									
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>25-watt</td> <td>N/A</td> <td>4 hours</td> </tr> <tr> <td>*10-watt</td> <td>4 hours</td> <td>6 hours</td> </tr> </tbody> </table> <p>*When using Alkaline batteries the output is limited to 10-watts <i>At 70°F (21°C) - continuous use (based on the battery type and quality)</i> <i>Li-Ion batteries will withstand 500 charging life cycles</i> <i>Based on maximum output into 50-ohm load and 50% duty cycle.</i></p>	Output Power	Alkaline	Li-Ion (Rechargeable)	25-watt	N/A	4 hours	*10-watt	4 hours	6 hours
Output Power	Alkaline	Li-Ion (Rechargeable)								
25-watt	N/A	4 hours								
*10-watt	4 hours	6 hours								
Environmental	IP65 and NEMA 4									
External Connectors	<ul style="list-style-type: none"> - 1 x speakOn® connector - 1 x fuse (output protection) 4A/250V - 1 x Mini-USB socket - 1 x socket for battery charger & 19V 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	<table border="0" style="width: 100%;"> <tr> <td style="vertical-align: top; width: 50%;"> <ul style="list-style-type: none"> - Complies with European standard CE (Directive 99/5/EC) (Pending) <ul style="list-style-type: none"> • EN 55011 </td> <td style="vertical-align: top; width: 50%;"> <ul style="list-style-type: none"> - Complies with FCC Rules Part 15 (Pending) <ul style="list-style-type: none"> • CFR 47 part 2 </td> </tr> </table>	<ul style="list-style-type: none"> - Complies with European standard CE (Directive 99/5/EC) (Pending) <ul style="list-style-type: none"> • EN 55011 	<ul style="list-style-type: none"> - Complies with FCC Rules Part 15 (Pending) <ul style="list-style-type: none"> • CFR 47 part 2 							
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	<ul style="list-style-type: none"> • EN 61000-4-3 • EN 61000-4-2: A1 & A2 • EN 61000-4-8: A1 • ETSI EN 300 330-2 • ETSI EN 301 489-1 • ETSI EN 301 489-3 	<ul style="list-style-type: none"> • CFR 47 Part 15
Manufacturing	Designed and manufactured following ISO 9001:2015.	
Standard Accessories (Supplied With Transmitter)	<ul style="list-style-type: none"> - Direct Connection Leads (10ft (3.5m) red/black leads) - Ground stake - Li-ion Rechargeable battery tray - DC/AC Power supply for rechargeable battery - Transmitter carry bag - Vehicle DC power supply 	
Compatible Accessories Options	<ul style="list-style-type: none"> - 4in (100mm) Loc3-25Tx transmitter clamp - 5in (125mm) Loc3-25Tx transmitter clamp 	

C. Operational

Item	Parameter	
Information Displayed	<ul style="list-style-type: none"> - Current (numeric) - Volts - Resistance - Frequency of output signal - Beeper volume (three levels & off) 	<ul style="list-style-type: none"> - Output Step bar graph showing the proportion of signal current successfully applied - High voltage warning if utility-to-ground potential exceeds 21V (DC or AC peak) - Animation icon confirming connection mode (Direct connection or Clamp)
Transmitting Modes	<ul style="list-style-type: none"> - Direct connection mode - applies a signal directly to the cable by clipping one output lead to the cable, the other to an independent ground. - Clamp mode – applies a signal using an inductive clamp (aka toroid or coupler) placed around the target pipe or cable. *Compatible frequencies of 8kHz and above. - *Modes are automatically selected when an accessory is plugged in. 	

Transmitting Frequency by Mode

Direct Connection Mode	<ul style="list-style-type: none"> - 3Hz/98Hz - 3Hz/128Hz - 4Hz/98Hz - 4Hz/128Hz; - ELF1-3Hz/6Hz/98Hz; 	<ul style="list-style-type: none"> - ELF4-4Hz/8Hz/128Hz; - 3Hz/6Hz/512Hz; - 3Hz/6Hz/640Hz; - 4Hz/8Hz/512Hz; - 4Hz/8Hz/640Hz
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	<ul style="list-style-type: none"> - ELF2-3Hz/6Hz/128Hz; - 20Hz to 9.82kHz - ELF3-4Hz/8Hz/98Hz;
Clamp Mode	<ul style="list-style-type: none"> - 8kHz to 9.82kHz
Transmitting Mode Power Output	<p>In accordance with FCC part 15:</p> <ul style="list-style-type: none"> - Frequencies under 45 kHz - 25 watts - 25 watts Li-Ion rechargeable battery, or external 19V 180W power adapter: - 10 watts when using alkaline batteries
Maximum Output Voltage	<ul style="list-style-type: none"> - Li-Ion rechargeable battery, or external 19V 180W power adapter: 130V peak - 12V power adapter: 42V peak
Maximum Output Current	4A peak
Output Protection	<ul style="list-style-type: none"> - Maximum utility-to-ground potential (operating): 21V (DC or AC peak) - Output protected against accidental momentary connection to up to 230V AC (rms)
Audio Indication	<ul style="list-style-type: none"> - Connection quality – Increased beep rate indicates a better-applied signal - Beep to confirm the action
Controls	<ul style="list-style-type: none"> - Use pushbuttons to select: <ul style="list-style-type: none"> • On/Off • Frequency • Output level <p>Information (volts & resistance) / Setting (volume, frequency & multi-mode)</p>
Compatible Receivers	<ul style="list-style-type: none"> - vLoc3-DM, vLoc3-Pro, vLoc3-5000, vLoc3-9800, vLoc3-XLF - vLocDM, vLocDM2, - vLoc, vLoc2 series receivers, and vLoc3 series receivers with matching frequencies

D. Rechargeable Battery Tray

Item	Parameter
Description	Loc3 Series Transmitter 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 122°F (-10°C to 50°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)
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	14.4lbs. (6.5kg)
Shipping Dimensions	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 - Extended warranty available

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