



VIVAX
METROTECH

Loc3-25Tx, 25-Watt Transmitter

Technical Specifications V1.4



VIVAX
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A. Description and Typical Applications

Item	Parameter
Model Name	Loc3-25Tx
Model Number	VX222-02
Description	25-Watt Low-Frequency transmitter for buried utility locating and pipeline defect mapping
Designed Use	- Transmitting active signals for 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) x7.3in(H) (332mm x 182mm x 185mm)									
Display Type	- Monochrome-dot-matrix graphic LCD with LED backlight - 2.4in x 1.3in (60mm x 32mm)									
Power Supply	- 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><tr><th>Output Power</th><th>Alkaline</th><th>Li-Ion (Rechargeable)</th></tr><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></table> *When using Alkaline batteries, the output is limited to 10 watts *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. Based on the maximum output into a 50-ohm load and 50% duty cycle.	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									
External Connectors	- 1 x speakON® socket for clamps and connection leads - 1 x Mini-USB socket for firmware updates - 1 x socket for battery charger & 12V DC power in - 1 x fuse socket (output protection) with 1.6A/250V fuse									
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) (Pending) • EN 55011 • 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 - Complies with FCC Rules Part 15 (Pending) • CFR 47 part 2 • CFR 47 Part 15
Manufacturing	Designed and manufactured per ISO 9001:2015
What's In the Box	- Loc3-25Tx Transmitter - 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	- 4-inch (100mm) transmitter clamp - 5-inch (125mm) transmitter clamp - Loc3 Series Backpack - Ground Extension Spool

C. Operational

Item	Parameter
Information Displayed	- Current (numeric) - Volts - Resistance - Frequency of output signal - Beeper volume (three levels & off) - 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	- Direct connection mode applies a signal directly to the cable by clipping one output lead to the cable and 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	- 3Hz/98Hz - 3Hz/128Hz - 4Hz/98Hz - 4Hz/128Hz; - ELF1-3Hz/6Hz/98Hz; - ELF2-3Hz/6Hz/128Hz; - ELF3-4Hz/8Hz/98Hz; - ELF4-4Hz/8Hz/128Hz; - 3Hz/6Hz/512Hz; - 3Hz/6Hz/640Hz; - 4Hz/8Hz/512Hz; - 4Hz/8Hz/640Hz - 20Hz to 9.82kHz
Clamp Mode	- 8kHz to 9.82kHz

Transmitting Mode	In accordance with FCC part 15:
Power Output	- 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	- Li-Ion rechargeable battery, or external 19V 180W power adapter: 130V peak - 12V power adapter: 42V peak
Maximum Output Current	- 1 Amp RMS constant output (<i>4 Amps Peak</i>) - *Dependent on frequency and mode
Output Protection	- 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	- Connection quality – Increased beep rate indicates a better-applied signal - Beep to confirm the action
Controls	- Use pushbuttons to select: • On/Off • Frequency • Output level Information (volts & resistance) / Setting (volume, frequency & multi-mode)
Compatible Receivers	- 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	- Two years - Extended warranty available

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