



VIVAX
METROTECH

vLoc3-XLF

Technical Specifications V1.5



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A. Description and Typical Applications

Item	Parameter
Model Name	vLoc3-XLF
Model Number	VX227-01
Description	Multi-purpose low-frequency precision locator receiver
Intended Use	Locating & pinpointing the position of long-line cables and pipelines

B. Characteristics

Item	Parameter
Construction	High-impact thermoplastic (ABS) injection molded housing
Weight	4.6lbs (2.1kg)
Dimensions	12.6in(L) x 4.9in(W) x 26.6in(H) (321mm x 124mm x 676mm)
Display Type	High-Visibility Color Display, 4.3"/10cm with 480 x 272 resolution
Receiver Antennas	Two sets of Omnidirectional Antennas, each comprising: <ul style="list-style-type: none"> • Two Compass antennas • Two Horizontal antennas • Two Vertical antennas
Batteries	<ul style="list-style-type: none"> - Six x AA Alkaline batteries - Rechargeable custom Lithium-ion batteries with 100-240V AC mains charger
Battery Life	<ul style="list-style-type: none"> - Alkaline – typically 12 hours of intermittent use at 70°F (21°C) - Lithium-ion – typically 27 hours of intermittent use at 70°F (21°C) <p>*With backlight activated, Battery life varies with temperature; re-charging cycles are approximately 500 times the life cycle</p>
Environmental	IP65 and NEMA 4
External Connectors	<ul style="list-style-type: none"> - Accessory and Charging Socket: To charge the internal batteries and attach plug-and-play accessories - Mini USB Port - for data transferring and software updates
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 and Approvals	<ul style="list-style-type: none"> - Complies with European standard CE (Directive 99/5/EC) <ul style="list-style-type: none"> • EN 55011 • EN 61000-4-2: A1 & A2 • ETSI EN 301 489-1 • ETSI EN 301 489-3 • ETSI EN 300 330-2

	<ul style="list-style-type: none"> • EN 61000-4-3 • EN 61000-4-8: A1 • ETSI EN 300 330-2 	<ul style="list-style-type: none"> - Complies with FCC Rules Part 15 • CFR 47 part 2 • CFR 47 Part 15
Manufacturing	Designed and manufactured per ISO 9001:2015	
What's In the Box	<ul style="list-style-type: none"> - vLoc3-XLF Receiver - USB data transfer cable - Custom lithium-ion battery pack - 100-240V AC mains charger 	<ul style="list-style-type: none"> - Six x AA Alkaline battery holder - User handbook - Soft carry bag
Compatible Accessories	<ul style="list-style-type: none"> - A-frame fault locator - Remote Antenna (Stethoscope) - Bluetooth Module - Factory Fitted GPS Module 	<ul style="list-style-type: none"> - Vehicle Charging DC Lead - Tx-Link (Optional transmitter radio link to remotely operate the transmitter) - Range of Sondes (waterproof, self-contained transmitters for use in nonmetallic pipes & ducts)

C. Operational

Item	Parameter
Information Displayed	<p>Status Bar Information:</p> <ul style="list-style-type: none"> - Antenna configuration: Peak, Peak with arrows, Broad Peak, Null, Delta Null, Omni Directional Peak, Omni Directional Broad - Line location - depth & current measurement - Battery condition - Speaker volume - Bluetooth and GNSS status (If installed) - Cellular connection status - Radio link to transmitter status (if installed) <p>Locate screen (Classic display):</p> <ul style="list-style-type: none"> - Signal strength - moving bar graph & numeric value - Bar graph color-coded, indicating distortion level - Peak level indicator - Proportional left/right indication - Compass: full 360°-line direction indicator - Gain level (in dB) - Frequency selected - Depth and current - Warnings (if activated) - Plug and play automatic recognition of accessories

	<ul style="list-style-type: none"> - Accessory specific custom screens <p>Information screen:</p> <ul style="list-style-type: none"> - GPS coordinates - Current measurement and depth - Logging options <p>Customer definable start-up screen</p>
<p>Locate Perspectives</p>	<ul style="list-style-type: none"> - Classic Locate – moving bar graph with the numeric value showing signal strength - Vector Locate Screen – fully automatic locate including offset, depth and locate uncertainty - Transverse Graph Screen - visual assessment of locate quality and distortion - Plan View Screen – fully automatic graphical representation of the cable position independent of cable direction, including depth/current and locate uncertainty. - Sonde Locate Screen – directing arrow to move to the Sonde position along the polar axis
<p>Configuration</p>	<p>The intuitive setup menu enables the user to configure:</p> <ul style="list-style-type: none"> - Set up frequency selection to toggle by "f" pushbutton - Setup location mode selection to toggle by "m" pushbutton - Setup screen view selection to toggle by long press "m" pushbutton - Units of measure (feet/meters) - Sound (Pitch) – normal or modulated - Language - Continuous depth and current options - Loudspeaker level - Backlight - Bluetooth pairing, if installed - Transmitter Radio Link if installed - Warnings (Excessive Tilt, Overhead Signal, Shallow Cable, Signal Overload) - Auto shut down – configurable to power down at five minutes, ten minutes, or never
<p>Data Logging</p>	<ul style="list-style-type: none"> - 50 million records of internal storage - Data can also be transferred for storage via cellular connectivity into the cloud using the Vivax-Metrotech application, VMMAp - All parameters stored at each location, including depth, current, date, time, mode, gain setting, frequency, locate uncertainty, longitude, latitude, and height above sea level
<p>Data Transfer</p>	<ul style="list-style-type: none"> - Via the Vivax-Metrotech "MyLocator3" software application available free of charge from www.vivax-metrotech.com. Data can be saved in csv, klm, shp, txt, xls and xlsx formats. The transfer is via a USB cable connection from the locator to the host computer. <p>Or</p> <ul style="list-style-type: none"> - Cellular transfer to the VMMAp Cloud (Vivax-Metrotech Cloud) via the VMMAp mobile app

Operating Frequencies	<ul style="list-style-type: none"> - Configurable frequencies from 32Hz to 32.8kHz <ul style="list-style-type: none"> • Power 50Hz and 60Hz • Radio 22.7kHz - 10.0kHz bandwidth - Optional "Signal Direction" (SD) – Enhanced locate mode gives the transmitter's outgoing current direction. (SD-USA: 256Hz/512Hz, SD-EUROPE: 320Hz/640Hz) 	
Operating Modes	<ul style="list-style-type: none"> - Peak, Peak with arrows, Broad Peak - Null, Delta Null - Omni Directional Peak Omni Directional Broad 	
Gain Control	<ul style="list-style-type: none"> - Manual gain using "+" or "-" keys - One-touch of "+" or "-" keys rescales to 60% of the bar graph scale - In Vector Screen, "+" and "-" keys act as zoom feature to keep the target utility in view - In the Transverse Graph screen, the "+" key saves the screen graph, "-" key clears the screen 	
Accuracy	Locate pinpointing accuracy:	<ul style="list-style-type: none"> - Over 9ft (3m) – 5% of the depth - Up to 9ft (3m) – 3% of the depth
	Depth measurement accuracy:	+/- 5% of the depth
	Current measurement accuracy:	<ul style="list-style-type: none"> - 5% of actual current – over 9ft (3m) - 3% of actual current – up to 9ft (3m)
	Depth range:	Dependent on the strength of the signal radiating to the locator
	*Performance rated using a single undistorted signal source	
Compatible Transmitters	Loc series transmitters, Loc3 series transmitters, FLS-2, and Loc-150Tx	

D. Shipping and Packaging

Item	Parameter
Shipping Weight	10.5lbs (4.75kg)
Shipping Dimension	16.5in(L) x 11in(W) x 27.6in(H) (420mm x 280mm x 700mm)

E. Warranty

Item	Parameter
Warranty	<ul style="list-style-type: none"> - Two years - Optional extended warranty available

F. Software Updates

Item	Parameter
Software	The software can be upgraded using a PC with a USB port. Program updates & locator software updates are available via the free MyLocator3 app.

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