



VIVAX
METROTECH

vLoc3-MLA

Technical Specifications V1.5



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A. Description and Typical Applications

Item	Parameter
Model Name	vLoc3-MLA
Model Number	VX220-02
Description	Plug-and-play adapter to locate buried EMS markers
Uses	<ul style="list-style-type: none"> - Detection of any one of eight marker ball types, in good conditions, buried to a depth of 6ft (2m) - Detection of large flat markers to a depth of 9ft (3m) - Detection of pin markers to a depth of 4.3ft (1,3m)

B. Characteristics

Item	Parameter
Construction	High-impact ABS injection molded housing
Weight	1.76lbs (0.8kg)
Dimensions	8.2in(L) x 6.2in(W) x 4.0in(H) (208mm x 157mm x 102mm)
Display Type	Per vLoc3 series receiver being used
MLA Antennas	1 x marker transmit antenna, 1 x marker receiver antenna
Power	Provided by vLoc3 series receiver being used
Environmental	IP65
Manufacturing	Designed and manufactured per ISO 9001:2015.
External Connectors	8-Pin male plug for connection to vLoc3 receivers (except vLoc3-ML, vLoc3-DM, vLoc3-Cam)
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)
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 • EN 61000-4-3 • 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"> - Complies with FCC Rules Part 15 <ul style="list-style-type: none"> • CFR 47 Part 2 • CFR 47 Part 15
Standard Accessories	<ul style="list-style-type: none"> - Cable organizer - Quick Guide

C. Operational

Item	Parameter																											
Additional information displayed on host vLoc3 series receivers	<p>Dedicated Marker Screen:</p> <ul style="list-style-type: none"> - Marker type icon - Marker signal strength bar graph (color-coded) with numeric value and peak level indicator <p>Dual Marker Screen (In addition to the classic locate screen):</p> <ul style="list-style-type: none"> - Marker type icon - Circular bar graph to indicate marker signal strength <p>Status Bar Information:</p> <ul style="list-style-type: none"> - Marker detection icon 																											
Operating Frequencies Pre-defined Marker Ball Frequencies	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="background-color: #cccccc;">Ref #</th> <th style="background-color: #cccccc;">Utility</th> <th style="background-color: #cccccc;">Frequency (Hz)</th> </tr> </thead> <tbody> <tr><td>1</td><td>Power (Red)</td><td>169,800</td></tr> <tr><td>2</td><td>Water (Blue)</td><td>145,700</td></tr> <tr><td>3</td><td>Sanitary (Green)</td><td>121,600</td></tr> <tr><td>4</td><td>Telephone (Orange)</td><td>101,400</td></tr> <tr><td>5</td><td>Gas (Yellow)</td><td>83,000</td></tr> <tr><td>6</td><td>CATV (Orange/Black)</td><td>77,000</td></tr> <tr><td>7</td><td>Non-potable Water (Purple)</td><td>66,350</td></tr> <tr><td>8</td><td>Power Europe (Blue/Red)</td><td>134,000</td></tr> </tbody> </table> <p>***Note: #8 – some markets only***</p>	Ref #	Utility	Frequency (Hz)	1	Power (Red)	169,800	2	Water (Blue)	145,700	3	Sanitary (Green)	121,600	4	Telephone (Orange)	101,400	5	Gas (Yellow)	83,000	6	CATV (Orange/Black)	77,000	7	Non-potable Water (Purple)	66,350	8	Power Europe (Blue/Red)	134,000
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Additional Operating Modes	<ul style="list-style-type: none"> - Marker Locator - Dual mode operation: Line Location combined with Marker Detection 																											
Gain Control	Manual gain using “+” or “-” with one touch to return to center (60% of FSD)																											
Performance in Area of Undistorted Fields	Generally locatable to 6ft (2m) depth																											
Accuracy¹⁾	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">Locate pinpointing accuracy in single line locate mode:</td> <td> <ul style="list-style-type: none"> - Over 9ft (3m) – 5% of depth - Up to 9ft (3m) – 3% of depth </td> </tr> <tr> <td>Depth measurement accuracy:</td> <td>3% of depth</td> </tr> </table>	Locate pinpointing accuracy in single line locate mode:	<ul style="list-style-type: none"> - Over 9ft (3m) – 5% of depth - Up to 9ft (3m) – 3% of depth 	Depth measurement accuracy:	3% of depth																							
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	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 – generally up to 15ft (5m)
Compatible Receivers	vLoc3-Pro, vLoc3-5000, vLoc3-9800, vLoc3-RTK Pro, vLoc3-XLF	

D. Shipping and Packaging

Item	Parameter
Shipping Weight	1.98lbs (0.9kg)
Shipping Dimension	9.3in(L) x 6.7in(W) x 4.1in(H) (235mm x 170mm x 105mm)

E. Warranty

Item	Parameter
Warranty	12 months

1) Locate and depth accuracy are quoted for 20 degC and average soil conductivity. It is also assumed the return current localization is deep compared to the target cable.

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

Performance Disclaimer Actual performance may vary depending on environmental conditions, user technique, and signal interference.

Software & Firmware Disclaimer Functionality described may depend on the software or firmware version installed. Features are subject to modification through future updates.

Battery & Power Disclaimer Battery life is estimated and may vary based on settings, usage, temperature, and battery age.

Calibration Disclaimer Self-Test results confirm system consistency with factory calibration but do not replace periodic professional calibration if required by company policy or regulation.

Compliance Disclaimer Compliance with regional standards may vary by country. Users are responsible for ensuring the product is used in accordance with local laws and regulations.

Use Case Disclaimer The system is intended for professional utility locating and should not be used for purposes outside the manufacturer's defined scope.

Third-Party Services Disclaimer Use of GNSS correction services or cloud platforms may require third-party subscriptions and are subject to their terms and availability.

Feature Availability Disclaimer: Certain features, frequencies, or accessories may only be available in specific markets due to regional regulations or product certifications. Please consult your local Vivax-Metrotech representative for availability in your area.

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