

VIVAX
METROTECH

vLoc3-5000

Technical Specifications V1.0



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A. Typical Applications

Item	Parameter
Description	Multi-purpose precision locator receiver
Uses	Locating & pinpointing the position of buried pipes, cables, and sondes

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	Transmissive 480 x 272 Pixel, 16-bit Color, High Visibility LCD, 4.3"
Receiver antennas	Two sets of 3D antennas
Battery	<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 intermittent use at 70°F (21°C) - Lithium-ion – typically 27 hours intermittent use at 70°F (21°C) (with full backlight turned on). Re-charging cycles approx. 500 times life cycle. Battery life varies with temperature.
Environmental	IP65 and NEMA 4
External connectors	<ul style="list-style-type: none"> - Accessory Socket – to charge the internal batteries and attach accessories - Mini USB socket for data transfer and programming
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 • 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

	<ul style="list-style-type: none"> • CFR 47 part 2 • CFR 47 Part 15
Standard Accessories (comes with receiver)	<ul style="list-style-type: none"> - USB data transfer cable - Custom lithium-ion battery pack - 100-240V AC mains charger () - Six x AA Alkaline battery holder - User handbook
Compatible Accessory Options	<ul style="list-style-type: none"> - A-frame fault locator - Remote Antenna (Stethoscope) - Vehicle Charging DC Lead - Factory fitted radio link to model Loc3-10Tx transmitter - Range of Sondes (waterproof self-contained transmitters for use in pipes & ducts)

C. Operational

Item	Parameter
Information displayed	<ul style="list-style-type: none"> - Standard “Bar graph” Locate with Peak, Peak with arrows, Null, Broad, Delta Null, Omni - Transverse Graph Mode - visual assessment of signal quality and distortion - Dedicated Sonde Locate - directing arrow to move to the Sonde position along the polar axis - Vector Screen - fully automatic locate including offset, depth and locate uncertainty - Plan View Screen - fully automatic graphical representation of the cable position independent of cable direction - Signal strength - moving bar graph & numeric value - Proportional left/right indication - Compass: full 360°-line direction indicator - Plug and play automatic recognition of accessories - Accessory specific custom screens - Line location - depth & current measurement - Sonde location - depth measurement - Gain level (in dB) - Frequency selected - Battery condition - Speaker volume - Bluetooth and GPS status - Product configuration menu & submenus

	<ul style="list-style-type: none"> - Customer definable start up screen <ul style="list-style-type: none"> • Sonde location - depth measurement • Gain level (in dB) • Frequency selected • Battery condition • Speaker volume • Bluetooth and GPS status • Product configuration menu & submenus • Customer definable start up screen
<p>Configuration</p>	<p>Intuitive setup menu enables user to configure:</p> <ul style="list-style-type: none"> - Setup frequency selection to toggle by “f” pushbutton - Setup location mode selection to toggle by “m” pushbutton - Setup screen views selection to toggle by long press “m” pushbutton - Units of measure (feet/me) - Sound (Pitch) – normal/modulated - Language - Continuous depth/current options - Loudspeaker level - Backlight - Bluetooth pairing if fitted - Transmitter Radio Link if fitted - 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 record internal storage - All parameters stored at each location including depth, current, date, time, mode, gain setting, frequency, locate uncertainty, longitude, latitude and height above sea-level - GPS data coordinates, date, and time
<p>Data Transfer</p>	<p>Uses Vivax-Metrotech “MyLocator” software application tool available free of charge from www.vivax-metrotech.com. Data can be saved in xlx, txt, fhp, kml (Google earth) formats</p>
<p>Operating frequencies</p>	<ul style="list-style-type: none"> - Configurable frequencies from 16Hz to 200 kHz <ul style="list-style-type: none"> • Power 50Hz and 60Hz • Radio 22.7kHz, 10kHz bandwidth - Signal Direction - enhanced product model giving direction of outgoing current: <ul style="list-style-type: none"> • SD-USA: 256Hz/512Hz, SD-EUROPE: 320Hz/640Hz - Signal Select – a real-time measurement of signal bleed-over caused by capacitive or inductive coupling to other utilities: <ul style="list-style-type: none"> • SIS-491Hz, SIS-982 Hz, SIS-8440 Hz, SIS-9820 Hz, SIS-35kHz

Operating modes	<ul style="list-style-type: none"> - Classic Locate (2-section Bar graph) - Transverse Graph Mode - Plan View (Omni Directional) - Vector Locate (Lateral Position & Depth) - Sonde Locate 	
Gain / scaling control	Manual gain using "+" or "-" "with one touch to return to center (60% of FSD) "+" or "-" "used to rescale the vector screen dependent on cable depth and offset	
Data logging	<ul style="list-style-type: none"> - 50 million records - Records include depth, current, frequency, mode, gain setting, signal strength, GPS coordinate, date and time (if Bluetooth active) 	
Data transfer	Uses Vivax-Metrotech software application tool available free of charge from www.vivax-metrotech.com . Data can be saved in following format: xlx, txt, fhp, kml (Google earth)	
Accuracy	Locate pinpointing accuracy:	<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
	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 strength of signal radiating to locator
	Performance rated using a single undistorted signal source	
Compatible transmitters	Loc-10SiSTx, and Loc3-10SiSTx	

D. Shipping and Packaging

Item	Parameter
Shipping weight	10.5lbs (4.75kg) (without transmitter)
Shipping dimensions	16.5in(L) x 11in(W) x 27.6in(H) (420mm x 280mm x 700mm) (without transmitter)

E. Warranty

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

F. Firmware Updates

Item	Parameter
Software	Software can be upgraded using a PC with USB port. Programs & locator software are available via MyLocator3 app.

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.