



VIVAX
METROTECH

vLoc3 Series Utility Locators



**Locate with speed, accuracy and confidence with the
vLoc3 series of buried utility locators**

www.vxmt.com | www.vivax-metrotech.com



vLoc3-Pro Utility Locator

The **vLoc3-Pro utility locator** introduces new innovative tools for locating buried utilities assuring damage prevention while gathering information for analysis. Distortion is easily detected by the receiver's two sets of 3D antennas and displayed on the bright full-color display. Along with classic locate screens the vLoc3 series locators offer new locate perspective screens:

Vector Locate - for fully-automatic non-walkover locating

Transverse Graph - showing both peak and null simultaneously providing immediate measurement of signal distortion

Plan View - showing the relative orientation of the cable at any angle

Sonde Locate - with guidance arrows leading to the sonde location even when it is vertical

The highly user-configurable vLoc3 series contains eight passive locate modes, fault-find mode, SD (showing direction of outgoing current), and a range of configurable frequencies from 98Hz to 200kHz. Audio and mechanical vibration alerts can also be configured by the user providing warnings for shallow depth, overload, overhead cables, and excessive swinging. Plug-in-play options for the receiver include optional Bluetooth module usable with external GPS devices and MLA foot to locate buried markers.

Real time distortion alerts in the vLoc3-Pro and vLoc3-ML



A green bar graph indicates clean locating conditions with very low distortion

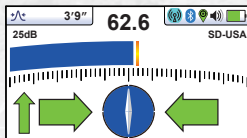


A blue bar graph indicates a medium level of distortion

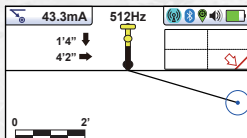


A red bar graph indicates very high distortion. Both Peak and Null locates are subject to significant positional errors

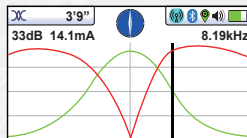
Utility locate modes for vLoc3-Pro and vLoc3-ML



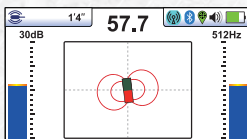
Classic Screen - as in previous vLoc locators, with the addition of three color-coded distortion levels



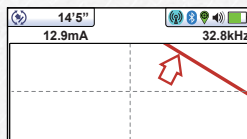
Vector Locate - shows orientation, line position, and distance relative to the locator in 3D



Transverse Plot Screen - is used to display the peak and null to compare distortion shape



Sonde Screen - arrow guidance showing direction to the sonde and depth of cover



Plan View Screen - displays the theoretical line in 2D from above ground in omnidirectional mode



vLoc3-Pro Receiver



Loc3-5Tx
5-Watt Transmitter



Loc3-10Tx
10-Watt Transmitter



vLoc3-ML Marker and Utility Locator

The **vLoc3-ML** with built-in transceiver is designed for contractors and utility companies to accurately detect and pinpoint major brands of buried passive electronic markers. The vLoc3-ML locator combines Vivax-Metrotech's advanced line locating technology and electronic marker system (EMS) detection in a single instrument capable of detecting and measuring the depth of commercially available EMS markers.



Along with classic locate screens the vLoc3 series locators offer new locate perspective screens:

- Vector Locate** - for fully automatic non-walkover locating
- Transverse Graph** - showing both peak and null simultaneously providing immediate measurement of signal distortion
- Plan View** - showing the relative orientation of the cable at any angle
- Sonde Locate** - with guidance arrows leading to the sonde location even when it is vertical

The highly user-configurable vLoc3-ML includes EMS marker locate mode, eight passive locate modes, fault-find mode, SD (showing direction of outgoing current), and a range of configurable frequencies from 98Hz to 200kHz. Audio and mechanical vibration alerts can also be configured by the user providing warnings for shallow depth, overload, overhead cables, and excessive swinging. Plug-in-play options for the receiver include an optional Bluetooth module usable with external GPS devices.

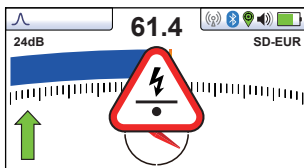
Marker locate modes

Dual Mode - Shows a peak locate response for both utility and marker location simultaneously

Dedicated Marker Mode - Shows a peak locate response for the buried marker

Marker Depth Readings - along with logging options are shown in the Dedicated Marker Mode

Real-time warnings in the vLoc3-Pro and vLoc3-ML



Real-time warnings are displayed across the receiver's display and accompanied by a mechanical vibration alert. Warnings are logged along with the cover of depth information when using the data logging feature of the receiver. All warnings can be turned on or off through the receiver's setup menu.



Signal Overload - Usually caused by operating very close to a power transformer or placing the unit very close to a transmitter in the Induction mode.



Shallow Cable - Indicates that the locator has detected a cable that is possibly less than 5.0"/15cm deep.

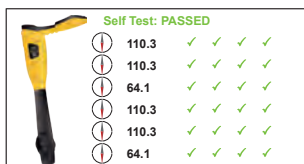


Swing Alert - This indicates that the operator is swinging the locator excessively and could result in misleading information.



Overhead cable - This indicates that the signal is mainly radiating from above traveling along overhead cables.

Self-test feature in the vLoc3 series receivers



Our patented on-the-fly integrated self-test feature provides the operator with total confidence that the equipment is in full working order. The test can be initiated in the field and require no extra equipment and no need to connect to a computer. Direct signal injection is used to confirm the antenna transfer function while further self-test check everything from the circuit boards to the LCD. Measurements are compared to the initial factory calibration and then subsequent self-tests performed to check the system has remained within the specified accuracy. The self-test automatically

checks all six sensors using three frequencies of low, medium, and high. The self-test results are stored in the internal memory with date and time stamps for later extraction using the free MyLocator3 desktop app available from our website.

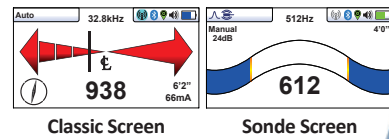
vLoc3-9800 Utility Locator

The **vLoc3-9800** is the updated version of the popular legacy 9860XT and 9890XT locators. Now with updated modern technology we have combined the best of both legacy locators into the vLoc3-9800.

The vLoc3-9800 utility locator introduces new innovative tools for locating buried utilities assuring damage prevention while gathering information for analysis. The highly user-configurable vLoc3-9800 contains two passive locate modes, and a range of configurable frequencies from 98Hz to 200kHz. Depth of cover and current on the line are shown with the push of a button. Pinpoint cable faults using directional arrows with the optional plug-in A-Frame.

The vLoc3-9800's 16-bit color, high visibility LCD, 4.3"/10cm display provides ultra-fast response with left/right arrow indicators while in auto-gain mode or peak locate bar graph with numeric value in manual gain mode. The vLoc3-9800 provides versatility with low frequencies for the telecom, power, and CATV industries as well as higher frequencies for the gas, water and sewer industries.

Options for the vLoc3-9800 include Bluetooth and plug-in Marker Locator Adapter.



Classic Screen

Sonde Screen



vLoc3-MLA Marker Locator Adapter

The **vLoc3-MLA (Marker Locator Adapter)** is designed for easy, fast and accurate location of buried EMS markers. Once located the MLA will give depth of cover to the buried marker with the touch of a button. The MLA attaches to the bottom of vLoc3-Pro, vLoc3-9800 and vLoc3-5000 receivers.

When attached and plugged in to the receivers two marker related operating modes are enabled. In the dedicated marker mode, the receiver screens show a peak bar graph with the signal strength from the marker, the marker type and depth to the marker. In the dual marker mode all the above are shown in addition to the standard utility locate screen including left/right arrows and compass.

The plug-and-play MLA will detect any one of nine marker types, in good conditions, buried to a depth of 6'/2m and large flat markers to 9'/3m.



The MLA works with the vLoc3-Pro, vLoc3-9800 and vLoc3-5000 receivers

Loc3 Series Broadband Transmitters

The Loc3-series broadband transmitters have selectable induction frequencies from 8kHz to 200kHz and direct-connect frequencies from 98Hz to 200kHz*, SD mode (signal direction), fault-find mode, and true resistance measurement up to 1 Mohm are all standard. The two-inch by one-inch backlit dot matrix display shows output current, connection type, volts, resistance, frequency, volume, battery condition and high voltage warnings.

Packaged in a lightweight, rugged, ergonomic IP54 housing, the transmitter provides consistent current output in direct connect, clamp and induction modes. The transmitter has protection against inadvertent connection to incoming voltages up to 260V.

The Loc3 series broadband transmitters are available in 5-watt, 10-watt, and 25-watt versions. These transmitters operate on "D" cell alkaline batteries or our custom rechargeable Li-ion battery tray.

- Built-in AVO meter
- SD & SiS modes for positive identification in congested areas
- Lightweight at only 7.15 lbs. / 3.24 kg with Li-ion battery *
- Transmit up to three frequencies simultaneously.
- Fault-find mode for locating sheath-to-ground fault

* Depending on the transmitter model



VMap Utility Mapping and Cloud Storage

When used with the vLoc series receivers, the VMap Utility Mapping app records data from the field which is instantly available online or can be shared by using the email function in the app to send .kml or .csv files. Field technicians using a vLoc series receiver can capture and store to the cloud depth readings, GPS coordinates, distance between locates and more.

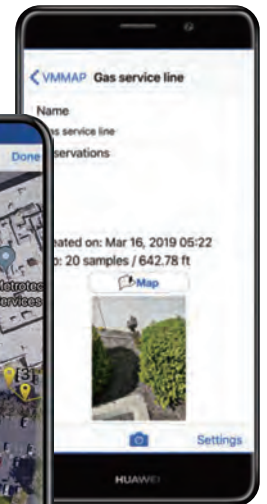
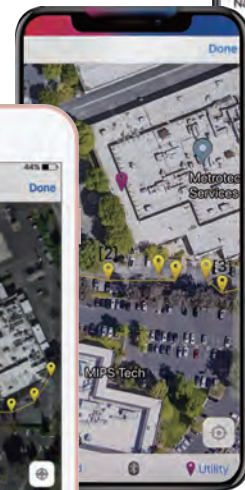
The image capture feature in the app allows the user to attach a JPEG format image to the surveys. This is useful to add points of interest or a snapshot of the completed survey. Users can access the log files with the data captured in the app via the web portal or share it from within the app. The data is compatible with Google Maps, Asset Management and GIS software. The VMap app generates maps in real time giving confidence to the field technician that the data being collected is accurate. Location data is obtained from the mobile phone, the locators GPS or an external GPS device of your choice.

- Uses both Google and Apple Maps
- Low and high GPS accuracy settings
- Plug-and-play Bluetooth pairing to receivers
- Export to a .kml file for use with popular GIS programs
- Compatible with Google Maps, Asset Management and GIS software
- Show multiple utilities on one map with color coded utility drop pins

The VMap application is compatible with both iOS and Android devices.



VMap



MyLocator3 Fleet Management Tool

Manage a single or fleet of vLoc3 series utility locators with the free MyLocator3 app. Configure locators by turning on or off features, selecting which frequencies the user has access to and creating custom startup screens with logo or owners information.

When a locator is connected to a computer running the MyLocator3 software, the program will automatically search our database for the latest software for both the utility locator and desktop application. The utility locator connects to the computer running MyLocator3 by the supplied USB cable.



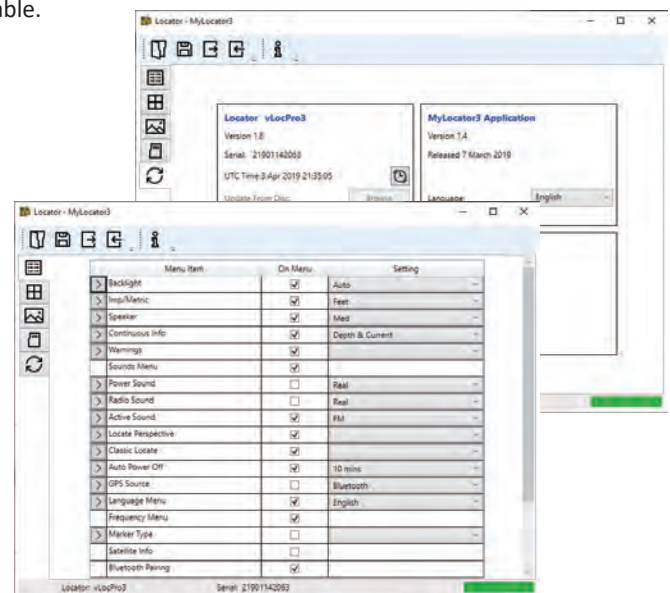
MyLocator3

Data transfer – MyLocator3 app will download the data collected from the locator including timestamps, GPS coordinates, depth measurements, current on the line, and notes entered at the time of locate.

Software updates – MyLocator3 checks for locator software updates and app software updates whenever connected to the Internet.

Personalize – Add owner/user information, a background picture or logo, or a short message to the startup screen.

Lock Feature – The locator's configurations and settings can be locked, enabling equipment or safety officers to ensure that features selected or removed by management cannot be over ridden by the user (requires optional lockout dongle).



Vivax-Metrotech Ltd.

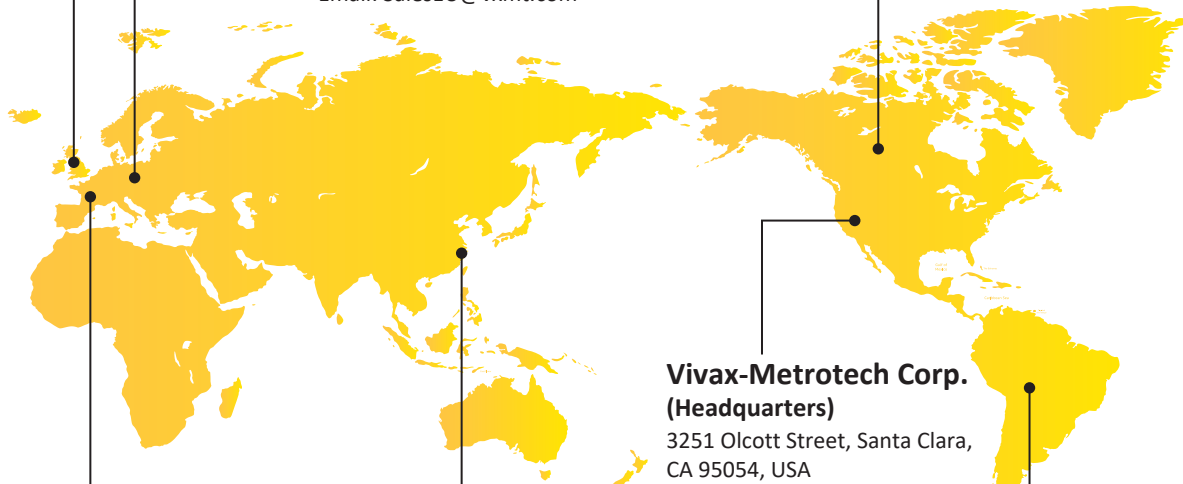
Unit 1, B/C Polden Business Centre, Bristol Road,
Bridgwater, Somerset, TA6 4AW, UK
Tel: +44(0)1793 822679
Email: SalesUK@vxmt.com

Vivax Canada Inc.

41 Courtland Ave Unit 8, Vaughan,
ON L4K 3T3, Canada
Tel: +1-289-846-3010
Fax: +1-905-752-0214
Email: SalesCA@vxmt.com

Metrotech Vertriebs GmbH

Am steinernen Kreuz 10a,
96110 Schesslitz, Germany
Tel: +49 9542 77227-43
Email: SalesEU@vxmt.com



Vivax-Metrotech (Shanghai) Ltd.

3/F No.90, Lane 1122 Qinzhou Rd.(N),
Shanghai, China 200233
Tel: +86-21-5109-9980
Fax: +86-21-2281-9562
Email: SalesCN@vxmt.com.cn

Vivax-Metrotech Corp. (Headquarters)

3251 Olcott Street, Santa Clara,
CA 95054, USA
T/Free: 1-800-446-3392
Phone: +1-408-734-1400
Fax: +1-408-734-1415
Email: SalesUSA@vxmt.com

Vivax-Metrotech SAS

Technoparc - 1 allée du Moulin Berger,
69130 Ecully, France
Tel: +33 (0)472 53 03 03
Fax: +33 (0)472 53 03 13
Email: SalesFR@vxmt.com

Ventas para América Latina

3251 Olcott Street, Santa Clara, CA 95054, USA
T/Free: 1-800-446-3392
Tel: +1-408-734-1400
Fax: +1-408-743-5597
Email: LatinSales@vxmt.com

Local Vivax-Metrotech Distributor:

Tag us on social media @vivax_metrotech



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

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VIVAX

METROTECH

Loc3-5Tx 5-Watt Transmitter

Technical Specifications V1.7



Worldwide Locations

World Headquarters, United States of America

Vivax-Metrotech Corporation

3251 Olcott Street, Santa Clara, CA 95054, USA

T/Free : 1-800-446-3392

Tel : +1-408-734-1400

Fax : +1-408-734-1415

Website : www.vivax-metrotech.com

Email : SalesUSA@vxmt.com

Central/South America and the Caribbean

Ventas para América Latina

3251 Olcott Street, Santa Clara, CA 95054, USA

T/Free : 1-800-446-3392

Tel : +1-408-734-1400

Fax : +1-408-743-5597

Website : www.vivax-metrotech.com

Email : LatinSales@vxmt.com

Canada

Vivax Canada, Inc.

41 Courtland Ave Unit 8, Vaughan, ON L4K 3T3, Canada

Tel : +1-289-846-3010

Fax : +1-905-752-0214

Website : www.vivax-metrotech.ca

Email : SalesCA@vxmt.com

United Kingdom

Vivax-Metrotech Ltd.

Unit 1, B/C Polden Business Centre, Bristol Road, Bridgwater, Somerset, TA6 4AW, UK

Tel : +44(0)1793 822679

Website : www.vivax-metrotech.co.uk

Email : SalesUK@vxmt.com

France

Vivax-Metrotech SAS

Technoparc - 1 allée du Moulin Berger, 69130 Ecully, France

Tel : +33(0)4 72 53 03 03

Fax : +33(0)4 72 53 03 13

Website : www.vivax-metrotech.fr

Email : SalesFR@vxmt.com

Germany

Metrotech Vertriebs GmbH

Am steinernen Kreuz 10a
D-96110 Schesslitz

Tel : +49 954 277 227 43

Website : www.vivax-metrotech.de

Email : SalesEU@vxmt.com

China

Vivax-Metrotech (Shanghai) Ltd.

3/F No.90, Lane 1122 Qinzhou Rd.(N),
Shanghai, China 200233

Tel : +86-21-5109-9980

Fax : +86-21-2281-9562

Website : www.vivax-metrotech.com

Email : SalesCN@vxmt.com.cn

A. Description and Typical Applications

Item	Parameter
Model Name	Loc3-5Tx
Model Number	VX219-05
Description	5-Watt Pipe & cable locator transmitter
Designed Use	<ul style="list-style-type: none"> - Transmitting active signals for the location of buried pipes and cables - Transmitting a fault-find frequency for the detection of cable faults

B. Characteristics

Item	Parameter									
Construction	High-impact ABS plastic									
Weight	<ul style="list-style-type: none"> - With Alkaline battery tray: 8.6lbs (3.9kg) - With Rechargeable battery tray: 7.15lbs (3.24kg) 									
Dimensions	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 Options	<ul style="list-style-type: none"> - 8 x alkaline "D" cells - 12~22V external DC power - Optional Li-Ion rechargeable battery tray 									
Battery Life	<table border="1"> <thead> <tr> <th>Output Power</th> <th>Alkaline</th> <th>Li-Ion (Rechargeable)</th> </tr> </thead> <tbody> <tr> <td>1-watt</td> <td>25 hours</td> <td>50 hours</td> </tr> <tr> <td>5-watt</td> <td>4 hours</td> <td>10 hours</td> </tr> </tbody> </table> <p>* 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.</p>	Output Power	Alkaline	Li-Ion (Rechargeable)	1-watt	25 hours	50 hours	5-watt	4 hours	10 hours
Output Power	Alkaline	Li-Ion (Rechargeable)								
1-watt	25 hours	50 hours								
5-watt	4 hours	10 hours								
Environmental	IP54 and NEMA 4									
External Connectors	<ul style="list-style-type: none"> - 1 x 3 pin connection socket (XLR) - 1 x fuse (output protection) 1.6A/250V - 1 x Mini-USB socket - 1 x socket for battery charger & 12V DC power in 									
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/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
Manufacturing	Designed and manufactured per ISO 9001:2015	
What's In the Box	<ul style="list-style-type: none"> - Loc3-5Tx Transmitter - Direct Connection Leads (XLR plug with 10ft (3.5m) red/black leads) - Ground stake - Alkaline battery tray - 8 x D Cell alkaline batteries 	
Compatible Accessories Options	<ul style="list-style-type: none"> - 2-inch (50mm) transmitter clamp - 4-inch (100mm) transmitter clamp - 5-inch (125mm) transmitter clamp - 18-inch (450mm) flexible transmitter clamp - Ground Extension Spool - Backpack - Live Plug Connector (LPC Separation Filter) - to connect and use the transmitter on lines carrying up to 240V AC - LCC Live Cable Connector - to connect and use the transmitter on lines carrying up to 480V AC - Rechargeable Battery Tray - custom Li-Ion battery tray and charger (input DC12V 3A, output DC18V-93.6 Wh) - 12V DC Vehicle Power Lead - for powering and charging the optional rechargeable battery from a vehicle 	

C. Operational

Item	Parameter
Information Displayed	<ul style="list-style-type: none"> - Current (numeric) - Volts - Resistance - Frequency of output signal

	<ul style="list-style-type: none"> - High voltage warning if volts online exceed 30V AC - Beeper volume (three levels & off) - Battery condition icon - Bar graph showing the proportion of successfully applied signal - Animation icon confirming connection mode (Induction, Direct connection, Clamp) - Tx-Link status (if installed)
Transmitting Modes	<ul style="list-style-type: none"> - Induction mode – applies signal inductively using the internal antenna - Direct connection mode - applies signal directly to the cable by clipping one output lead to the cable, the other to an independent ground - Clamp mode – applies signal using an inductive clamp (aka toroid or coupler) that is placed around the target pipe or cable <p>* Modes are automatically selected when accessories are plugged in. The default mode (no accessories) is Induction.</p>

Transmitting Frequency by Mode

Induction Mode	Multiple induction frequencies between 8.19 kHz and 200 kHz
Direct Connection Mode	Available frequencies between 98Hz and 200 kHz with default frequencies of 512Hz, 8.19 kHz, 33 kHz, 65 kHz, 200 kHz
Clamp Mode	Available frequencies between 8.19 kHz and 200 kHz with default frequencies of 8.19 kHz, 33 kHz, 65 kHz, and 200 kHz
Transmitting Mode Power Output	In accordance with FCC part 15: <ul style="list-style-type: none"> - <i>Frequencies under 45 kHz - 5 watts</i> - <i>Frequencies over 45 kHz - 1 watt</i>
Maximum Output Voltage	50V RMS
Maximum Output Current	0.3A RMS constant current
Output Protection	Output protected against accidental momentary connection to up to 240V AC
Audio Indication	<ul style="list-style-type: none"> - Connection quality – Increased beep rate indicates a better-applied signal - Beeps to confirm the selected action
Controls	<ul style="list-style-type: none"> - Use pushbuttons to select: <ul style="list-style-type: none"> • On/Off • Frequency • Output level • Information (volts & resistance) / Setting (volume, frequency & multi-mode)
Compatible Receivers	vLoc3 series, vLoc 2 series, vLoc series, VM-510FFL+

D. Rechargeable Battery Tray (optional accessory)

Item	Parameter
Description	Optional Li-Ion rechargeable battery tray with charger for Loc3 series transmitters
Input/output	<ul style="list-style-type: none"> - Input DC 12V 3A - Output DC 18V-93.6 Wh
Battery Type	Li-Ion battery
Temperature Range	<ul style="list-style-type: none"> - Operating: 14°F to 140°F (-10°C to 60°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	<ul style="list-style-type: none"> - Battery Tray: 3.31lbs. (1.5kg) - Transmitter with battery tray: 7.1lbs. (3.2kg)
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	<ul style="list-style-type: none"> - With alkaline battery tray: 13.9lbs. (6.3kg) - With rechargeable battery tray: 12.3lbs. (5.6kg)
Shipping Dimension	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 (Transmitter with alkaline battery tray) - Extended warranty available

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