



VIVAX
METROTECH

Fiber Optic Locate System 2

Technical Specifications V1.6



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 : +1-408-734-3880

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 : +1-408-734-3880

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
96110 Schesslitz

Tel : +49 9542 77227-43

Website: www.vivax-metrotech.de

Email : SalesEU@vxmt.com

China

Vivax-Metrotech (Shanghai) Ltd.

Building 10, Lane 1158 Zhongxin Rd.,
Songjiang District, Shanghai, China, 201615

Tel : +86-21-5109-9980

Website: www.vivax-metrotech.com

Email : SalesCN@vxmt.com.cn

A. Description and Typical Applications

Item	Parameter
Model Name	FLS-2
Model Number	VX205-04
Description	A rack-mounted high-power transmitter for long-distance cables.
Designed use	For locating and monitoring buried fiber optic and communication cables.

B. Characteristics

Item	Parameter
Construction	Hand-held Control Unit: ABS Plastic Chassis: SECC Galvanized steel plate
Weight	AC system: 15.8lbs (7.16kg), DC system: 14.6lbs (6.64kg)
Dimensions	19in (L) x 11.85in (W) x 3.46in (H) (483mm x 301mm x 88mm)
Mounting	- Standard brackets: 19in (482.6mm) - Rack adaptor brackets: 23in (584.2mm) and 24in (610mm)
Display type	Touch screen control unit (attached by a coiled cable) LCD: 4.2in (L) x 2.6in (W) x 0.1in (T) (106mm x 67mm x 3mm) LCD peripheral: 5.1in (W) x 3.5in (H) x 1.2in (T) (130mm x 88mm x 29.5mm)
External connectors	- USB 2.0 Type-A port on the front panel for software updates - DB9-type connector on the front panel for factory usage - RJ11 on the front panel for the hand-held control unit - RJ45 10/100 Ethernet port on the back panel - RJ11 on the back panel for phone connection
Modem	Internal V.92 (56kbps)
Temperature range	Operating: 32°F to 104°F (0°C to 40°C) Storage: -4°F to 158°F (-20°C to 70°C)
Humidity	Operating: 20-55%, non-condensing
Altitude	Operating: 10,000ft (3,048m) Non-operating: 40,000ft (12,192m)
Internal cooling	Two internal fans: maximum 15.36CFM (0.435CMM) x 2

Compliance and approvals	FCC Part 15, Class A devices EN61000-3-2 (2006) EN61000-6-2 (2005)	EN61000-3-3 (1995) EN55011 Group 1, Class A devices NEBS Certification
Manufacturing	Designed and manufactured per ISO 9001:2015.	
What's In the Box	<p>FLS-2 transmitter (with 19-inch brackets installed)</p> <p>Hand-held Control Unit</p> <p>AC or DC power cord, per order</p> <p>Mounting bracket sets for 23-inch or 24-inch installation (with hardware)</p> <p>Manual</p>	

C. Operational

Item	Parameter
Information Displayed	The hand-held display unit controls the transmitter through its touch screen. The display unit's coiled cord plugs into the RJ11 connector on the front of the transmitter.
Transmitting Modes	<p>2 Way sends the locate signal in two different directions (FLS-TX2W)</p> <p>4 Way sends the locate signal in four different directions (FLS-TX4W)</p> <p>16 Way sends the locate signal in 16 different directions (FLS-TX16W)</p>
Transmitting frequencies	From 20Hz to 10kHz
Power Output	Maximum 50 Watts
Maximum Output Voltage	100V RMS
Maximum Output Current	1A RMS
Output Protection	Over-current and over-voltage
Ethernet	10Base-T/100Base-TX fast Ethernet.
Compatible Receivers	<ul style="list-style-type: none"> - All vLoc3 series receivers with matching frequencies - vLoc, vLoc2 series receivers with matching frequencies

D. Output Signal Specifications

Item	Parameter
Output Waveforms	<ul style="list-style-type: none"> - Sine waves (LS - Locate Signal) in the range of 20Hz – 10kHz - Complex waveforms possible (ELF – Extremely Low-Frequency Signal)

Output Current	<ul style="list-style-type: none"> - Maximum 1A RMS LS + 300mA ELF (optional) - Maximum 600mA ELF only mode
Output Power	<ul style="list-style-type: none"> - Maximum 50W on LS + 20W on ELF (optional) - Maximum 32W on ELF only mode
Output Voltage	<ul style="list-style-type: none"> - Maximum 100V RMS on LS + 65V on ELF (optional) - Maximum 150V ELF only mode

E. Power Requirements (AC or DC units to be specified at the time of ordering)

Item	Parameter
Building Circuit Breaker	<ul style="list-style-type: none"> - AC system: minimum 10A - DC system: minimum 10A
Electrical Ratings	<ul style="list-style-type: none"> - AC system: 120V AC (2.0A, 60Hz), 120V AC (2.0A, 50Hz), 240V AC (1.0A, 50Hz) - DC system: -48V DC, 6.0A
Operating Voltage	<ul style="list-style-type: none"> - AC system: 100 to 265V AC - DC system: -40 to -60V DC
Power Draw	<ul style="list-style-type: none"> - AC system: 180W at 120V AC and 180W at 240V AC - DC system: 150W

F. Telemetry Interface

Item	Parameter
Alarm Relay Type	Isolated
Contact Resistance	10ohm (typical)
Control Relays	Accepts form A and C type
Response Time	500ms

G. Telephone Access

Item	Parameter
Tone Duration	Minimum 50ms
Tone Type	Standard tones from landline or mobile telephone

H. Shipping and Packaging

Item	Parameter
Shipping Weight	<ul style="list-style-type: none"> - AC system: 21.4lbs (9.7kg) - DC system: 20.3lbs (9.2kg)
Shipping Dimension	23.2in(L) x 17.3in(W) x 8.7in(H) (590mm x 440mm x 220mm)

I. Shipping and Packaging

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

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