



VIVAX
METROTECH

Fiber Optic Locate System 2

Technical Specifications V1.3



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The FLS-2 is a high-performance long-distance fiber optic cable locating and monitoring transmitter. As a central office or regen rack-mounted system, the FLS-2 offers a full 50 watts of output. The FLS-2 can be used for long-haul fiber lines and metropolitan loop networks. All features may be accessed remotely or locally with the hand-held touch screen.

A. Configuration

Item	Parameter
2 way FLS-2	Will send a signal in 2 different directions (FLS-TX2W)
4 way FLS-2	Will send a signal in 4 different directions (FLS-TX4W)
16 way FLS-2	Will send a signal in 16 different directions (FLS-TX16W)

B. Output Signal Specifications

Item	Parameter
Output Waveforms	<ul style="list-style-type: none"> - Sine waves (LS - Locate Signal) in the range of 200Hz – 8kHz - Complex waveforms possible (ELF – Extremely Low-Frequency Signal)
Output Current	<ul style="list-style-type: none"> - Maximum 1A RMS + 300mA ELF (optional) - Maximum 600mA ELF only
Output Power	<ul style="list-style-type: none"> - Maximum 50W on LS + 20W on ELF (optional) - Maximum 32W on ELF only
Output Voltage	<ul style="list-style-type: none"> - Maximum 100V RMS on LS + 65V on ELF (optional) - Maximum 150V ELF only

C. Power Requirements (AC or DC units to be specified)

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, 60Hz), 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

D. Telemetry Interface

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

E. Environmental Requirements

Item	Parameter
Altitude	<ul style="list-style-type: none"> - Operating: 10,000ft (3,048m) - Non-operating: 40,000ft (12,192m)
Humidity	Operating: 20-55%, non-condensing
Internal Cooling	Fans: maximum 15.36CFM (0.435CMM) x 2
Temperature	<ul style="list-style-type: none"> - Operating: 32°F to 104°F (0°C to 40°C) - Storage: -4°F to 158°F (-20°C to 70°C)

F. Physical

Item	Parameter
Weight	<ul style="list-style-type: none"> - AC system: 15.8lbs (7.16kg) - DC system: 14.6lbs (6.64kg)
Dimension	19in (W) x 11.85in (D) x 3.46in (H) (483mm x 301mm x 88mm)
Hand-held Display Unit	Touch LCD screen with attached coiled cable and stylus
Modem, Internal	V.92 (56kbps)
RS-232 port	DB9-type connector on front panel, Terminal setting: 57,600bps, 8 data bits, no parity, 1 stop bit
USB 2.0	USB Type-A socket on the front panel
Ethernet	10/100, RJ45 on the back panel

G. Rack Mounting Brackets

Item	Parameter
Sizes	<ul style="list-style-type: none"> - Standard bracket: 19in (482.6mm) - Rack adaptor brackets: 23in (584.2mm) and 24in (610mm) - Multi-position brackets: 19in (482.6mm), 23in (584.2mm) and 24in (609.6mm). Allows for maximum 5.25in (133.4mm) front-to-back horizontal positioning in the rack, using 0.5in (12.7mm) increments.

H. Telephone Access

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

I. Ethernet Access

Item	Parameter
Ethernet	10Base-T/100Base-TX fast Ethernet.

J. Approval

Item	Parameter
Approval	<ul style="list-style-type: none"> <li style="width: 50%;">- FCC Part 15, Class A devices <li style="width: 50%;">- EN61000-3-3 (1995) <li style="width: 50%;">- EN61000-3-2 (2006) <li style="width: 50%;">- EN55011 Group 1, Class A devices <li style="width: 50%;">- EN61000-6-2 (2005)


K. Technical Data

Item	Parameter
Features	<ul style="list-style-type: none"> - Permanently installed 50W transmitter - Digital signal processing, impedance matching, line monitoring - Remotely controlled operation - 2-16 signal direction multiplexing - ELF output - Powered by AC or DC - Data logging of all operating parameters including setup changes, alarms, measurements of line conditions, time, date, and serial number

L. 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)

M. Warnings

Item	Parameter
	<p>Dimensions and weight conversions are approximate (metric data is the most accurate).</p> <p>Vivax-Metrotech Corporation continues to update and improved its products – information on this data sheet may have changed or been superseded – check with your local sales representative or Vivax-Metrotech Corporation for updates.</p>

All products are designed and manufactured per ISO 9001:2015.

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