TECHNICAL DATA

Fluke SmartTrace™ 2082 Series Underground Utilities Locator



Accurately locate, trace, and document buried electrical lines, communications cables, and other underground utilities—reducing costly strikes, improving site visibility, and streamlining documentation workflows.

Accidentally hitting a utility line during a project can lead to costly repairs and create hazardous public safety situations. Digging in the wrong place can also lead to unnecessary delays and costs for your project, and ultimately, your company. Avoid this disruption with the rugged and durable SmartTrace™ 2082 Series, designed to accurately pinpoint underground utilities and buried services. Designed for electricians with a CAT IV 600 V rating, the locating kits come complete and ready for use with a Transmitter, Receiver, test lead kit, batteries and additional fuses, all in a mobile, protective duffle bag.



BUILT-IN MAPPING CAPABILITY

Integrated Bluetooth® connection with PointMan® enables real-time mapping and documentation directly from the field (available with Elite Kit only).

INDUSTRY-LEADING SAFETY

The only underground locator with a CAT IV 600 V-rated transmitter—meeting the highest electrical safety standard for industrial and utility work.

OPTIMIZED SPEED AND VISIBILITY

Grayscale display and fast, intuitive UX/UI ensure clear readings and quicker operation in any field condition.



Increase Productivity on the Job with Precise, Accurate Locating

The SmartTrace™ 2082 Underground Utility Locators are the rugged, economical solution for locating underground energized and de-energized wires, cables and pipes. The Transmitter utilizes the proven 33 kHz frequency, which is ideal for most locating applications. With the Receiver, trace the signal in Induction or Direct Test Leads Connection Modes. The Receiver features fast sound and meter response and easy depth measurements to 20 feet at the push of a button, as well as highly sensitive Power and Radio Modes which detect energized wires and radio signals on underground lines.



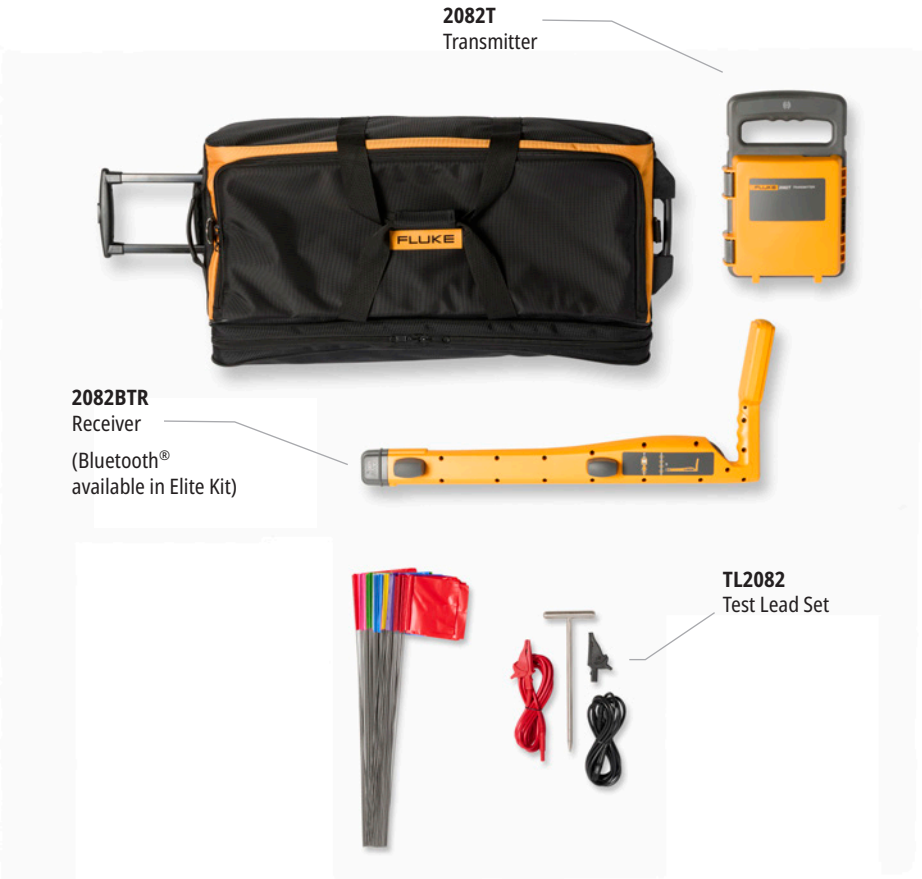
Integrated Mapping and Geolocation with PointMan®

Document. Map. Verify. All in one step.

The SmartTrace™ 2082 Series Elite Kit is designed for a connected, data-driven workflow—integrating Bluetooth® connectivity and GPS location services through PointMan®, the industry-standard mobile mapping platform for underground utilities. This integration enables technicians to capture accurate geospatial data in real time—right from the job site—without the need for additional hardware or manual data entry (subscription options available).

Key Mapping Capabilities

- Seamless Bluetooth® connectivity: Connects wirelessly to mobile devices running PointMan® to record each locate with exact GPS coordinates.
- Real-time geolocation: Displays and logs asset positions directly from the receiver to your mobile map.
- Accurate documentation: Captures essential locate details such as signal type, depth, and date/time for traceable digital records.
- GIS and cloud compatibility: Exports to major geospatial and asset management systems, including Esri®, Trimble®, and other GIS software.
- Workflow efficiency: Reduces manual marking and transcription errors—simplifying job closeout and compliance reporting.





Maximum Safety in the Field

Work confidently around energized circuits.

The SmartTrace™ 2082 Series is the only underground utility locator with a CAT IV 600 V-rated transmitter, setting a high benchmark for safety in utility tracing. This rating ensures protection for technicians working around live electrical systems, substations, or industrial environments. Built with reinforced insulation and safety-tested to IEC 61010 standards, the 2082 allows operators to trace both energized and de-energized circuits using a single instrument—eliminating the need for multiple tools and minimizing risk in mixed-voltage environments.

Optimized for Harsh Jobsite Conditions

Built to perform in sunlight, rain, and everything in between.

From bright desert job sites to wet utility vaults, the SmartTrace™ 2082 Series delivers reliable visibility and performance in any environment. Its high-contrast grayscale display is readable in full sunlight or light rain, ensuring operators can confidently track signals without glare or washout. The ruggedized housing, IP54-rated ingress protection, and shock-tested design provide the durability professionals expect from Fluke—minimizing downtime and protecting against water, dust, and impact.



Depth and Detection Versatility

See deeper, find faster.

Accurately locate and measure buried utilities up to 20 feet deep, with detection range extending to 100 feet depending on conditions. The 2082's advanced signal processing and semi-automatic gain control deliver fast, stable readings—allowing operators to precisely trace cables or pipes even in noisy environments. With multiple active and passive modes, users can select the optimal frequency for the job—whether tracing energized lines, de-energized circuits, or conductive pipes. This flexibility reduces time spent re-tracing or adjusting equipment.

Utility Maintenance and Repair

Locate faster. Restore service sooner.

Utility technicians and linemen face complex underground environments where energized and de-energized lines coexist. The SmartTrace™ 2082 Series Elite Kit provides a single, safe solution for tracing both—reducing troubleshooting time and eliminating the need to switch between tools. With CAT IV 600 V-rated safety, automatic frequency selection, and depth measurement up to 20 feet, linemen can quickly locate faults, verify circuit continuity, or trace buried conductors before performing maintenance or repairs. Paired with PointMan® mapping, every locate can be logged and stored with GPS coordinates for simplified documentation and compliance.

Benefits:

- Safely locate and trace energized or de-energized lines in one step
- Reduce repair time through fast, accurate pinpointing
- Digitally record every locate for maintenance history and reporting while connected to the PointMan® application

Applications:

- Electrical fault isolation
- Service line verification
- Preventative maintenance for underground utilities

Construction and Excavation Safety

Avoid costly hits. Protect people and infrastructure.

Before excavation, trenching, or drilling, knowing what lies below is critical. The SmartTrace™ 2082 Series Elite Kit Underground Utility Locator gives construction professionals the confidence to dig safely—preventing accidental strikes that can delay projects, increase costs, or cause injuries. With multiple tracing modes, high-visibility display, and real-time mapping, crews can visualize and verify underground assets before breaking ground. Rugged design and long battery life ensure the tool performs through full workdays on challenging outdoor sites.

Benefits:

- Prevent accidental strikes on buried utilities
- Maintain safety and compliance on every job site
- Improve project planning and reduce downtime

Applications:

- Pre-excavation and trenching surveys
- Site layout and asset verification
- Contractor safety and compliance workflows

General Specifications

Specification	Characteristic
Maximum voltage between any terminal and earth ground	600 V
Operating temperature	-20 °C to 50 °C (-4 °F to 122 °F)
Storage temperature	-40 °C to 60 °C (-40 °F to 140 °F)
Humidity (non-condensing)	0–90% (5–30 °C), 0–75% (30–40 °C), 0–45% (40–50 °C)
Altitude	≤ 2000 m (≤ 6561 ft)
Ingress protection	IP54 (non-operating)
Pollution degree	2
Electromagnetic Compatibility (EMC) International	IEC 61326-1: Portable Electromagnetic Environment; IEC 61326-2-2 CISPR 11: Group 1, Class A
Electromagnetic Compatibility (EMC) USA (FCC)	47 CFR 15 subpart B. This product is considered an exempt device per clause 15.103. 2082BTR only: USA (FCC) 47 CFR 15 Subpart C Sections 15.203, 15.209, 15.249.






	2082T Transmitter	2082R Receiver	2082BTR Receiver (Bluetooth®)	TL2082 Test Lead Set
Power supply	8 × D cells (IEC LR20)	6 AA, IEC LR6	6 AA, IEC LR6	
Fuse protection 0.5 A, 1000 V, IR 30 kA,	0.5 A, 1000 V, IR 30 kA, Φ6.3×32 mm, Fast.			
Safety compliance	IEC 61010-2-030, CAT IV 600 V	IEC 61010-2-030: CAT IV 600 V	IEC 61010-2-030: CAT IV 600 V	IEC 61010-031: CAT IV 600 V, 10 A.
Electromagnetic Compatibility (EMC)			IEC 61326-1: Portable Electromagnetic Environment; IEC 61326-2-2 CISPR 11: Group 1, Class A	
Wireless radio frequency range			2400 MHz to 2483.5 MHz	
Wireless radio output power			<100 mW	




Model	FLUKE-2082	FLUKE-2082BT
Description	SmartTrace™ 2082 Core Underground Utilities Locator Kit Includes: Receiver, Transmitter, Carrying Case, Test Lead Kit, Replacement Fuses (2), AA Batteries (6), D Batteries (8)	SmartTrace™ 2082BT Elite Underground Utilities Locator Kit Includes: Receiver with Bluetooth®, Transmitter, Carrying Case, Test Lead Kit, Replacement Fuses (2), Marking Flags (100), AA Batteries (6), D Batteries (8)

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