

TECHNICAL DATA

Fluke SmartTrace™ 2082 Underground Utilities Locator



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.

PRECISE LOCATING PERFORMANCE

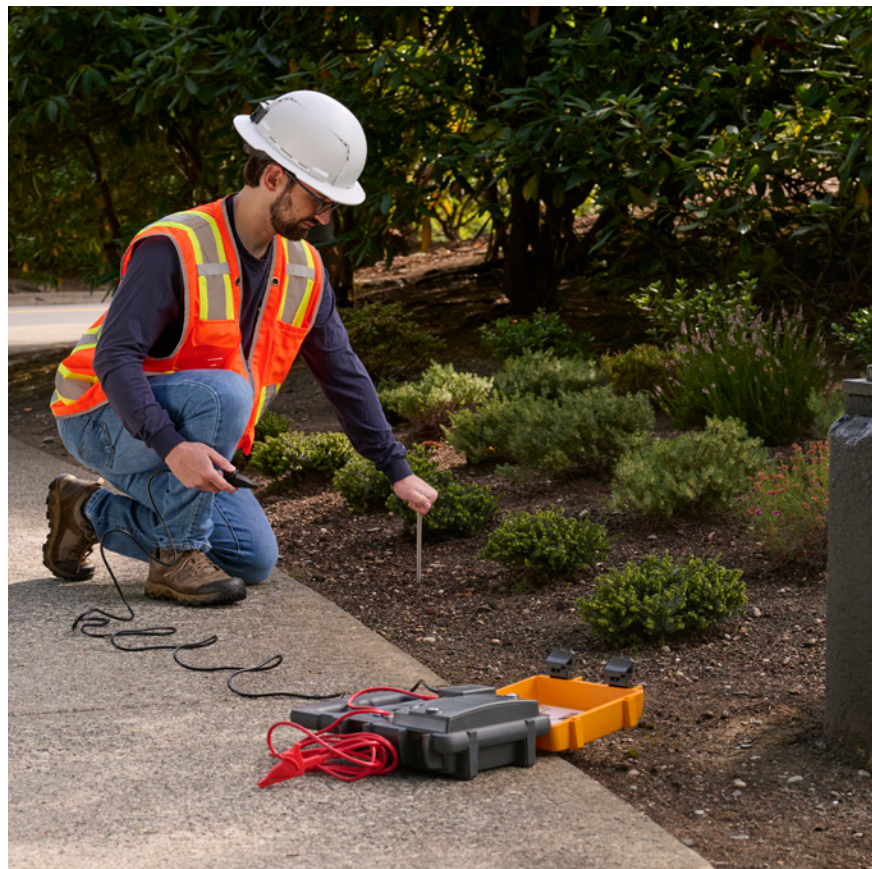
Proven 33 kHz frequency and dual connection modes deliver fast, accurate tracing of energized and de-energized utilities.

EFFICIENCY BUILT IN

Instant depth readings up to 20 ft and responsive Power and Radio modes ensure quick detection and confident results in any field condition.

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, designed to accurately pinpoint underground utilities and buried services. Designed for electricians with a need for CAT IV 600V rating or working in a CAT IV 600V rated environment, 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.





Maximum Safety in the Field

Work confidently around energized circuits.

The SmartTrace™ 2082 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 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 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 (8 kHz and 33 kHz), and depth measurement up to 20 feet, linemen can quickly locate faults, verify circuit continuity, or trace buried conductors before performing maintenance or repairs.

Benefits:

- Safely locate and trace energized or de-energized lines in one step
- Reduce repair time through fast, accurate pinpointing

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 gives construction professionals the confidence to dig safely—preventing accidental strikes that can delay projects, increase costs, or cause injuries. With multiple tracing mode and a high-visibility display and 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
Safety Compliance	IEC 61010-1
Electromagnetic Compatibility (EMC) International	IEC 61326-1: Portable Electromagnetic Environment; IEC 61326-2-2 CISPR 11: Group 1, Class A



	2082T Transmitter	2082R Receiver	AF2082 A-Frame (optional accessory)	SC2082 Signal Clamp (optional accessory)	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, Φ 6.3×32 mm, Fast.				
Safety compliance	IEC 61010-2-030, CAT IV 600 V	IEC 61010-2-030: CAT IV 600 V		IEC 61010-2-032: CAT IV 600 V, 100 A.	IEC 61010-031: CAT IV 600 V, 10 A.



Model	FLUKE-2082
Description	SmartTrace™ 2082 Underground Utilities Locator Kit Includes: Receiver, Transmitter, Carrying Case, Test Lead Kit, Replacement Fuses (2), AA Batteries (6), D Batteries (8)

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