

# AT-3500 Underground Cable and Pipe Locator System

## Precise pinpointing of buried services

### Locate underground energized and de-energized wires, cables and pipes.

Keep productivity high and operational costs low with the Amprobe AT-3500. It's the rugged, economical solution for locating underground energized and de-energized wires, cables and pipes. Great for parking lot and airport lighting applications, it precisely pinpoints buried services with exceptionally fast sound and meter response. Take depth measurements with the press of a button. The backlight multiple-segment bar-graph digital display plus audible indicators show and tell readings. The AT-3500 employs the proven 33 kHz frequency for most locating applications. To avoid lines at utility construction sites, it also offers the highly sensitive power and radio modes.

### Features

- **Locates** underground energized and de-energized wires, cables and pipes
- **Three testing modes for best accuracy**
  - Passive Power (50 / 60 Hz)
  - Passive Radio (RF)
  - Active T-3500 signal generator with induction mode or directly connected to the cable with test leads or optional clamp
- **Active Mode** Depth measurement up to 16 ft (4.9 m)
- **Semi-automatic gain control** – fast signal location and control
- **33 kHz active frequency** – best frequency for general locating
- **Precise pinpointing** of buried services and exceptionally fast sound and meter response with backlight multiple-segment bar-graph digital display and audible indicators
- **Complete instrument**, ready for use with receiver, transmitter, connection cable, ground stake and ground cable

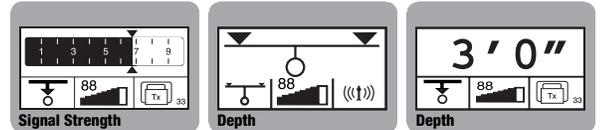


#### Safety Certification

All Amprobe tools, including the Amprobe AT-3500, are rigorously tested for safety, accuracy, reliability, and ruggedness in our state-of-the-art test lab. In addition, Amprobe products that measure electricity are listed by a 3rd party safety lab, either UL or CSA. This system assures that Amprobe products meet or exceed safety regulations and will perform in a tough, professional environment for many years to come.

## Specifications

Features	AT-3500
Depth Measurement	16 ft (4.9 m)
Passive Tracing Frequencies	50 / 60 Hz
Transmitter frequency	Single, non-adjustable
R-3500 Frequency ranges	Range 1: radio 15 kHz to 23 kHz Range 2: power network 50 Hz / 60 Hz; optionally 100 Hz (can be adjusted by Amprobe service personnel) Range 3: transmitter 32.768 kHz
R-3500 Sensitivity at a depth of 1m	Range 1: radio >20 µA Range 2: power network >7 mA Range 3: transmitter >5 µA
R-3500 Dynamic response range	Range 1: radio 120 dB Range 2: power network 135 dB Range 3: transmitter 120 dB
R-3500 Depth determination	Depth range 4 in ... 16 ft (0.1 m ... 4.9 m) Resolution 0.33 ft (0.1 m)
R-3500 Accuracy	Range 1: radio ±20 % Range 2: power network ±20 % Range 3: transmitter ±5 % (>5m (6-FT)), ±20 % (<5m (15-FT))
R-3500 Power supply	10 x IEC R6 / AA cell / Mignon
R-3500 Operating time	40 hours (for intermittent use with alkaline batteries, 20 °C)
R-3500 temp. range in accordance with DIN EN 60068-1	Operation -4 °F to 131 °F (-20 °C to +55 °C) Storage -22 °F to 158 °F (-30 °C to +70 °C)
R-3500 Weight	5.5 lbs (2.5 kg)
R-3500 Dimensions (W x H x D)	3.9 x 26 x 9.9 in (99 x 660 x 252 mm)
R-3500 type of protection in accordance with EN 60529	Dust and water protected IP 67 from the lower edge of the receiver up to the lower edge of the battery compartment, and IP 56 for all parts above this delineation.
T-3500 transmitted power	0.1 W / 0.5 W (switchable)
T-3500 Frequency	32.768 kHz
T-3500 Power supply	6 x IEC R20 / D cell / Mono
T-3500 Operating time	40 hours (for intermittent use with alkaline batteries, 20 °C)
T-3500 temp. range in accordance with DIN EN 60068-1	Operation -4 °F to 131 °F (-20 °C to +55 °C) Storage -22 °F to 158 °F (-30 °C to +70 °C)
T-3500 Weight	3.75 lbs (1.7 kg)
T-3500 Dimensions (W x H x D)	10.2 x 10 x 5.5 in (260 x 255 x 140 mm)
T-3500 type of protection in accordance with EN 60529	Dust and water protected IP 56



### Identify Underground Cables, Pipes & Wires

The Amprobe AT-3500 discovers the location of underground pipes, cables, and wires. Its innovative design allows the AT-3500 to measure depths up to 16 feet. The transmitter operates at a 33 kilohertz (kHz) frequency signal, which provides the most reliable results for most locating applications. The Amprobe AT-3500 also comes with a connection cable and alligator clip for connecting the transmitter to the buried pipe, cable or wire to be traced.

### Expert Features for Any Situation

The AT-3500 can be used in different modes for optimal tracing in any situation.

**Passive power mode** locates energized wires with a 50/60 Hz frequency and does not require a transmitter. The receiver alone detects electromagnetic fields emitted by buried energized lines conducting currents.

**Passive radio mode** does not require a transmitter and uses the receiver to detect radio waves coming from cellular towers,

radio stations, etc. that are picked up and carried by underground metal objects, such as cables or pipes.

**Inductive active mode** uses the transmitter to wirelessly induce a signal into a buried pipe, cable, or wire. The receiver then detects the signal carried by the buried utility, which enables tracing.

**In active direction connection mode**, the transmitter is connected to the buried utility with test leads (provided there is an available access point to the utility). The transmitter then sends a signal across the wire or pipe, which enables tracing.

**The AT-3500 can trace non-metallic pipes that do not conduct a tracing signal.** Some of these pipes have embedded metal trace that will conduct signal for tracing. In active inductive or direct connection modes, the AT-3500 can also be used to trace other non-metallic pipes by using existing metal wires inside the pipe or inserting metal fish tape into the pipe.

**Included Accessories:** Receiver, transmitter, connection cables, ground stake, carrying case, user manual, batteries (installed)

**Optional Accessories (not included in AT-3500 Kit):**  
SC-3500 - 4" Signal Clamp  
MLS55-3 - Pipe transmitter

