

# TIC 300 PRO

## Non-Contact High Voltage Detector

### MSHA certified and intrinsically safe, trusted by utility crews for over 20 years

The Amprobe TIC 300 PRO high voltage detector is a non-contact voltage detector for detecting alternating current (AC) on transmission lines, power distribution equipment, downed power lines, fuses, electrical outlets, and other power lines. It detects voltages in low, medium and high voltage applications (30-122kVAC) with bright visual and loud alerts. It is rugged and reliable for utility, industrial, heavy manufacturing and mine safety applications. The TIC tracers get thrown around in utility trucks, but the units are built to withstand the rough treatment.

The TIC 300 PRO has a low-voltage setting (30 to 1,500VAC) for checking voltage presence in breaker panels, breakers, power outlets and wiring. It also has a high-voltage setting (1,500 to 122,000 V AC when used with the TIC 410A Hot Stick attachment) for checking transmission lines, downed power lines and substations. The presence of AC voltage is indicated by an LED light and audible beeper. It is MSHA certified and intrinsically safe. The TIC 300 PRO has a self-test that verifies the tester works properly and is drop-proof up to 6 feet.

### TIC 300 PRO Features

- **MSHA certified and intrinsically safe**
- **Utility tool** for checking transmission lines, power distribution equipment, down power lines, fuses, and load break connectors
- **Visual and audible voltage indication**
- **High-voltage setting 1500 V ac to 122,000 V AC** (with TIC 410A Hot Stick) for utility applications such as transmissions lines, power distribution equipment, down power lines, transformers and more.
- **Low-voltage setting** for checking voltage presence in breaker panels, breakers, power outlets and wiring
- **A unique self-test feature** so there is no need to connect directly to a current carrying conductor – saving your time and keeping you safe.
- **Ergonomic design** with a convenient handle
- **Drop proof up to 6 feet**



**TIC 300 PRO**  
High Voltage  
Tester





## Detailed Specifications

| Specifications        |                                                                                                                                                                                | TIC 300 PRO |
|-----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|
| Operating Voltage     | LOW Range: 30 to 1500 VAC<br>HIGH Range: 1500 VAC to 122 kV AC<br>*Use only with Amprobe optional accessory hot stick and proper safety equipment for voltages up to 122 kV AC |             |
| Operating Temperature | 0°C to +52°C (32°F to +125°F); RH < 90% RH                                                                                                                                     |             |
| Storage Temperature   | 0°C to +52°C (32°F to +125°F) battery removed.                                                                                                                                 |             |
| Environment           | < 2000m, outdoor operation                                                                                                                                                     |             |
| Power                 | 9 volt alkaline battery                                                                                                                                                        |             |
| Power Consumption     | OFF: 340uA<br>Low / High Detection mode: 39 mA                                                                                                                                 |             |
| Duty Cycle            | Continuous                                                                                                                                                                     |             |
| Response Time         | Instantaneous                                                                                                                                                                  |             |
| Dimensions            | 345(L) x 75(W) x 47(H)mm (13.5 x 3.0 x 1.8 in)                                                                                                                                 |             |
| Weight                | 243g (0.5 lb.)                                                                                                                                                                 |             |
| Supplied with         | User manual, battery and carrying case                                                                                                                                         |             |

| Range                         |                                                            |
|-------------------------------|------------------------------------------------------------|
| Non-Contact Voltage Detection | 30-1500 VAC<br>1500- 122,000 VAC (with Hot Stick TIC 410A) |
| Typical                       | Sensitivity                                                |

| Self-Test Verification |                 |        |                |        |
|------------------------|-----------------|--------|----------------|--------|
| Line voltage (kV)      | Phase to ground |        | Phase to phase |        |
| phase to phase         | (ft-in)         | (m)    | (ft-in)        | (m)    |
| 0.03 to 1.0            | note 1          | note 1 | note 1         | note 1 |
| 1.1 to 15.0            | 2-1             | 0.64   | 2-2            | 0.66   |
| 15.1 to 36.0           | 2-4             | 0.72   | 2-7            | 0.77   |
| 36.1 to 46.0           | 2-7             | 0.77   | 2-10           | 0.85   |
| 46.1 to 72.5           | 3-0             | 0.90   | 3-6            | 1.05   |
| 72.6 to 121            | 3-2             | 0.95   | 4-3            | 1.29   |

| Low Voltage                                      |                                                                           | High Voltage                    |                                                                           |
|--------------------------------------------------|---------------------------------------------------------------------------|---------------------------------|---------------------------------------------------------------------------|
| Voltage<br>(Phase to neutral with 890k Ohm load) | Detection Range (From the tip of the probe to the target line)<br>Average | Voltage<br>(Phase with no load) | Detection Range (From the tip of the probe to the target line)<br>Average |
| 30 V                                             | 1.5"                                                                      | 1.5 kV                          | 0.5"                                                                      |
| 75 V                                             | 6.5"                                                                      | 2.0 kV                          | 1"                                                                        |
| 100 V                                            | 8.5"                                                                      | 4.0 kV                          | 2"                                                                        |
| 120 V                                            | 10"                                                                       | 10.0 kV                         | 8"                                                                        |
| 220 V                                            | 1'1"                                                                      | 15.0 kV                         | 1'2"                                                                      |
| 500 V                                            | 1'7"                                                                      | 20.0 kV                         | 1'8"                                                                      |
| 1000 V                                           | 2'10"                                                                     | 25.0 kV                         | 2'2"                                                                      |

For complete specifications please download the user manual on [www.amprobe.com](http://www.amprobe.com).