

**2052R/2062R**  
Wire Tracer Receiver  
**2000T**  
Wire Tracer Transmitter

Product Specifications



2/2023 (English)

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## General Specifications

|  | 2052R  | 2062R   | 2000T  |
|--|--|---|--|
| <b>Size</b>                            | (18.3 x 7.5 x 4.3) cm<br>~(7.2 x 3.0 x 1.7) in | (27.8 x 11.3 x 6.5) cm<br>~(10.9 x 4.4 x 2.6) in        | (18.3 x 9.3 x 5) cm<br>~(7.2 x 3.7 x 2.0) in |
| <b>Weight</b>                          | 0.57 kg (~1.26 lbs)                            | 0.54 kg (~1.2 lbs)                                      | 0.57 kg (~1.26 lbs)                          |
| <b>Signal indications</b>              | Numeric, bar graph display, audible beep, LED  |   | LEDs, audible beep                           |
| <b>Sensor response time</b>            | 500 ms   |   | --   |
| <b>Battery voltage monitoring</b>      | 5 s  |   |  |
| <b>Line voltage monitoring</b>         | --   |   | 1 s  |
| <b>Range detection, open air</b>       |  |   |  |
| SmartSensor mode, direction indication | --   | ≤15 cm (6 in), 230 V ac, high mode, sensitivity level 2 | --   |
| Tip sensor mode                        |  |   |  |
| Pinpoint accuracy                      | 5 cm (2.0 in)                                  |   |  |
| Max distance                           |  |   |  |
| Energized mode                         | ≤6.1 m (20 ft)                                 |   |  |
| De-energized mode                      | ≤4.5 m (14.7 ft)                               |   |  |
| <b>Display</b>                         |  |   |  |
| Size                                   | LCD 6.5 cm (2.5 in)                            | LCD 8.9 cm (3.5 in)                                     | LEDs   |
| Visible area (VA) (W x H)              | ~(37 x 49) mm<br>~(1.5 x 2.0) in               | ~(70 x 50) mm<br>~(2.75 x 2.0) in                       | --   |
| Resolution                             | 240 (RGB) x 320 px                             | 480 (RGB) x 320 px                                      |  |
| Type                                   | Color TFT LCD                                  |   | LEDs   |
| Backlight                              | Yes  |   | --   |
| Booting time                           | ≤3 s   | ≤2 s  | ≤2 s   |

## Electrical Specifications

|  | 2052R  | 2062R   | 2000T   |
|--|--|---------|---|
| <b>Battery</b>                                     | 4 x AA, IEC LR6, alkaline or NiMH rechargeable |         | 8 x AA, IEC LR6, alkaline or NiMH rechargeable                |
| <b>Battery life</b>                                |  |         |   |
| Trace mode   | ~16 hrs  | ~20 hrs | --  |
| High/low mode                                      | --   | --      | ~25 hrs   |
| Loop mode  | --   | --      | ~18 hrs   |
| <b>Low battery indicator</b>                       | Yes  |         |   |
| <b>Power consumption, typical</b>                  |  |         |   |
| Trace mode   | 110 mA   |         | --  |
| High/low mode                                      | --   | --      | 70 mA   |
| Loop mode with Clamp                               | --   | --      | 90 mA   |
| No signal transmission                             | --   | --      | 10 mA   |
| <b>⚠ Fuse</b>                                      | --   | --      | 1 A, 700 V, fast-acting, 6 mm x 32 mm, 50 kA interrupt rating |
| <b>Operating voltage</b>                           | 600 V ac/dc                                    |         |   |
| <b>Operating frequency</b>                         |  |         |   |
| Energized/loop mode                                | 6.25 kHz                                       |         |   |
| De-energized mode                                  | 32.77 kHz                                      |         |   |
| <b>Automatic voltage detection</b>                 |  |         |   |
| Energized mode                                     | See NCV detection                              |         | ≥35 V ac  |
| De-energized mode                                  |  |         | <35 V ac  |
| <b>NCV detection (40 Hz to 400 Hz) sensitivity</b> |  |         |   |
| Maximum  | 90 V, ≤2.0 m (6.5 ft)                          |         | --  |
| Minimum  | 600 V, ≤1.0 cm (0.4 in)                        |         | --  |
| <b>Signal current output (typical)</b>             |  |         |   |
| Energized mode                                     |  |         |   |
| High mode  | --   |         | 60 mA RMS <sup>[1]</sup>                                      |
| Low mode   |  |         | 20 mA RMS <sup>[1]</sup>                                      |

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|---|-------|-------|---|
| De-energized mode   |       |       |   |
| High mode   | --    |       | 110 mA RMS <sup>[2]</sup>   |
| Low mode  |       |       | 40 mA RMS <sup>[2]</sup>  |
| Loop mode   |       |       |   |
| Test leads  | --    |       | 160 mA RMS <sup>[2]</sup>   |
| i400 AC Clamp, one wind of wire over the clamp  |       |       | 385 mA RMS <sup>[2]</sup>   |
| <b>Signal voltage output (nominal)</b>  |       |       |   |
| Energized mode  |       |       |   |
| High mode   | --    |       | 14 W @ 230 V ac/50 Hz,<br>3.33 k $\Omega$ @ 230 V ac <sup>[3]</sup>               |
| Low mode  |       |       | 4.6 W @ 230 V ac/50 Hz,<br>11.5 k $\Omega$ @ 230 V ac <sup>[3]</sup>              |
| De-energized mode   |       |       |   |
| High mode   | --    |       | 31 V RMS, 140 Vp-p <sup>[4]</sup> ,<br>0.86 W @ 1 k $\Omega$ load <sup>[5]</sup>  |
| Low mode  |       |       | 27.5 V RMS, 120 Vp-p <sup>[4]</sup> ,<br>0.1 W @ 1 k $\Omega$ load <sup>[5]</sup> |
| Loop mode   |       |       |   |
| Test leads  | --    |       | 32 V RMS, 140 Vp-p <sup>[4]</sup> ,<br>0.87 W @ 1 k $\Omega$ load <sup>[5]</sup>  |
| i400 AC Clamp, one wind of wire over the clamp  |       |       | 31 mV <sup>[4]</sup> ,<br>0.89 W @ 1 $\Omega$ load <sup>[5]</sup>                 |
| [1] Sink current<br>[2] Short circuit current<br>[3] Sink power<br>[4] Open circuit voltage<br>[5] Output power |       |       |   |

## Environmental Specifications

|  | 2052R  | 2062R | 2000T                     |
|--|--|-------|---------------------------|
| <b>Temperature</b>                         |  |       |                           |
| Operating                                  | -20 °C to 50 °C (-4 °F to 122 °F)  |       |                           |
| Storage                                    | -20 °C to 70 °C (-4 °F to 158 °F), without batteries   |       |                           |
| <b>Relative humidity</b>                   |  |       |                           |
| Operating                                  | 95 %: 10 °C to <30 °C (50 °F to <86 °F)<br>75 %: 30 °C to <40 °C (86 °F to <104 °F)<br>45 %: -20 °C to <10 °C or 40 °C to 50 °C (-4 °F to <50 °F or 104 °F to 122 °F), non-condensing  |       |                           |
| Storage                                    | <95 %, non-condensing, without batteries   |       |                           |
| <b>Altitude</b>                            |  |       |                           |
| Operating                                  | 2000 m (~6562 ft)  |       |                           |
| Storage                                    | 12 000 m (~39 371 ft)  |       |                           |
| <b>IP rating</b>                           | IP40   |       |                           |
| <b>Drop test</b>                           | 1 m (~3.28 ft)   |       |                           |
| <b>Transient protection</b>                | --   |       | 8.00 kV (1.2/50 µs surge) |
| <b>Safety</b>                              | IEC 61010-1: Pollution Degree 2<br>IEC 61010-2-030: CAT IV 600 V   |       |                           |
| <b>Electromagnetic Compatibility (EMC)</b> |  |       |                           |
| International                              | IEC 61326-1: Portable Electromagnetic Environment, CISPR 11: Group 1, Class A<br><i>Group 1: Equipment has intentionally generated and/or uses conductively-coupled radio frequency energy that is necessary for the internal function of the equipment itself.</i><br><i>Class A: Equipment is suitable for use in all establishments other than domestic and those directly connected to a low-voltage power supply network that supplies buildings used for domestic purposes. There may be potential difficulties in ensuring electromagnetic compatibility in other environments due to conducted and radiated disturbances.</i><br><i>Caution: This equipment is not intended for use in residential environments and may not provide adequate protection to radio reception in such environments.</i> |       |                           |
| Korea (KCC)                                | Class A Equipment (Industrial Broadcasting & Communication Equipment)<br><i>Class A: Equipment meets requirements for industrial electromagnetic wave equipment and the seller or user should take notice of it. This equipment is intended for use in business environments and not to be used in homes.</i>  |       |                           |
| USA (FCC)                                  | 47 CFR 15 subpart B. This product is considered an exempt device per clause 15.103.  |       |                           |