## Leica ULTRA

# Precision utility tracing



The Leica ULTRA provides our most advanced precision utility tracing system. Intelligent signal processing has been integrated with unique flexible operating modes, to help save you time and increased confidence in your results.

Selectable antenna and customised frequencies optimises your instrument for site specific applications, supported by our AIM system which monitors signal interference levels, recommending which mode to use for the best results.

- Configure for site specific applications
- Choose from 100 selectable frequencies
- Select antenna to best optimise for your job site
- Compass shows the user the direction of the trace utility
- Direction enabled Identifying your target utility amongst multiple parallel utilities
- Ambient Interference Measurement (AIM)
- Offset Measuring
- Connect to GIS & GNSS systems
- Remote controlled transmitter
- Choose between 5W and 12W transmitter power outputs for superior tracing performance





## Leica ULTRA

### Locators

| Technical Data               | Standard                    | Advanced |
|------------------------------|-----------------------------|----------|
| Dimension                    | 691 x 325 x<br>(27.2 x 12.8 |          |
| Weight (including batteries) | 2.2 kg (4.8 lb)             |          |

### PERFORMANCE

| PERIORWANCE                 |   |
|-----------------------------|---|
| Frequency range             | 50 Hz - 200 kHz   |
| Sensitivity                 | 33 kHz (1 μA at 1 m)  |
| Dynamic range               | 117 dB  |
| Depth, max                  | 6 m (20 ft)   |
| Locate accuracy             | ±5% depth   |
| Dynamic overload protection | 30 dB (automatic)   |
| Depth accuracy              | In line - ±5% to 3 m (±5% to 10 ft)<br>Sonde - ±5% to 3 m (±5% to 10 ft)<br>Passive - ±5% to 3 m (±5% to 10 ft) |

| FEATURES  |   |                                |  |
|---|---|--------------------------------|--|
| Enabled frequencies   | 512 Hz, 3.14 kHz, 8.192 kHz,<br>32.768 kHz, 83.1 kHz, 200 kHz   |                                |  |
| Custom frequencies  | Up to 100 custom frequencies<br>from 256 Hz - 83 kHz            |                                |  |
| DE direction enabled  | Any fre<br>from 256 H   | quency<br>Iz - 10 kHz          |  |
| Fault-finding DE based                                      | 263   | Hz                             |  |
| Cathodic protection frequencies                             | 100 Hz,   | 120 Hz                         |  |
| Power frequencies   | 50 Hz, 60 HZ, 100 Hz, 120 Hz,<br>150 Hz, 180 Hz, 450 Hz, 540 Hz |                                |  |
| Language support  | 17 user selectable  |                                |  |
| Selectable auto shutdown                                    | 5, 10, 20 or 30 minutes   |                                |  |
| PC based configuration                                      | Software up<br>configuration ca                                 | pdates and<br>n be set by user |  |
| High contrast graphical LCD                                 | ✓   | ✓                              |  |
| Line direction compass with proportional L/R arrow guidance | <b>√</b>  | ✓                              |  |
| Offset depth  |   | ✓                              |  |
| AIM   |   | ✓                              |  |
| Receiver / transmitter communications                       |   | ✓                              |  |
| Bluetooth® connectivity                                     |   | ✓                              |  |

### **ENVIRONMENTAL**

| Operating temperature    | -20 °C - 50 °C (-4 °F - 122 °F)  |
|--------------------------|----------------------------------|
| Storage temperature      | -32 °C - 70 °C (-25 °F - 158 °F) |
| Environmental protection | IP65                             |

### **BATTERY**

| Batteries          | 2 D-cell (LR20)                          |
|--------------------|--|
| Battery life (max) | 30 hrs continuous<br>70 hrs intermittent |

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### **Transmitters**

| Technical Data               | 5 Watt | 12 Watt                         | Advanced |
|------------------------------|--------|---------------------------------|----------|
| Dimension                    |        | 4 x 305 x 91 r<br>0 x 12 x 7.75 |          |
| Weight (including batteries) |        | 3.4 kg (7.7 lb)                 | )        |

### PERFORMANCE

| Frequency range | 2      | 56 Hz - 200 kH | łz      |
|-----------------|--------|----------------|---------|
| Output power    | 5 Watt | 12 Watt        | 12 Watt |
| Current, max    |        | 500 mA         |         |
| Voltage, max    |        | 65V rms        |         |

| FEATURES                              |   |   |                 |
|---------------------------------------|---|---|-----------------|
| Enabled frequencies                   | 512 Hz, 3.14 kHz, 8.192 kHz,<br>32.768 kHz, 83.1 kHz, 200 kHz |   |                 |
| Custom frequencies                    | Up to 100 custom frequencies<br>from 256 Hz - 83 kHz          |   | quencies<br>kHz |
| Language support                      | 17 user selectable  |   | ble             |
| Induction                             | 16 induction frequencies                                      |   | encies          |
| PC based configuration                | Software updates and configuration can be set by user         |   |                 |
| Fault-finding DE based                | 263 Hz  |   |                 |
| Multimeter functions                  | Watts, currents, ohms and volts                               |   | and volts       |
| High contrast graphical LCD           | ✓   | ✓ | ✓               |
| External 12V power connection         |   |   | ✓               |
| Dual output                           |   |   | ✓               |
| Receiver / transmitter communications |   |   | ✓               |

### **ENVIRONMENTAL**

| Operating temperature    | -20 °C to 50 °C (-4 °F to 122 °F)  |
|--------------------------|------------------------------------|
| Storage temperature      | -32 °C to 70 °C (-25 °F to 158 °F) |
| Environmental protection | IP65                               |

### **BATTERY**

| Batteries          | 10 D-Cell (LR20)<br>or Li-lon battery pack (optional)    |
|--------------------|--|
| Battery life (max) | 100 hrs with alkaline<br>80 hrs with Li-lon battery pack |

### Offset depth

Measures horizontal and vertical distance to the line

### Ambient Interference Measurement (AIM)

Measures interference and recommends best frequency

**Receiver / Transmitter communications**Remotely control transmitter frequency, power level and more

### Bluetooth®

Wireless connectivity to GIS field PC, GNSS receiver

**Dual output**Remotely select active output (must have optional dual output leads)

 $\begin{array}{l} \textbf{Induction frequencies} \\ 8.01 \text{ kHz}, \ 8.192 \text{ kHz}, \ 8.44 \text{ kHz}, \ 9.82 \text{ kHz}, \ 29.4 \text{ kHz}, \ 32.8 \text{ kHz}, \ 39 \text{ kHz}, \ 44.6 \text{ kHz}, \ 65.5 \text{ kHz}, \ 78.1 \text{ kHz}, \ 80.4 \text{ kHz}, \ 82.5 \text{ kHz}, \ 83.1 \text{ kHz}, \ 89 \text{ kHz}, \ 131 \text{ kHz}, \ 200 \text{ kHz} \end{array}$ 



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- when it has to be **right** 

Geosystems

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