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

- when it has to be **right**

Leica Geosystems

Leica ULTRA

Locators

Technical Data	Standard	Advanced
Dimension	691 x 325 x 122 mm (27.2 x 12.8 x 4.75 in)	
Weight (including batteries)	2.2 kg (4.8 lb)	
PERFORMANCE		
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) Sonde - ±5% to 3 m (±5% to 10 ft) Passive - ±5% to 3 m (±5% to 10 ft)	
FEATURES		
Enabled frequencies	512 Hz, 3.14 kHz, 8.192 kHz, 32.768 kHz, 83.1 kHz, 200 kHz	
Custom frequencies	Up to 100 custom frequencies from 256 Hz - 83 kHz	
DE direction enabled	Any frequency from 256 Hz - 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, 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 updates and configuration can be set by user	
High contrast graphical LCD	✓	✓
Line direction compass with proportional L/R arrow guidance	✓	✓
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 70 hrs intermittent	

Transmitters

Technical Data	5 Watt	12 Watt	Advanced
Dimension	254 x 305 x 91 mm (10 x 12 x 7.75 in)		
Weight (including batteries)	3.4 kg (7.7 lb)		
PERFORMANCE			
Frequency range	256 Hz - 200 kHz		
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, 32.768 kHz, 83.1 kHz, 200 kHz		
Custom frequencies	Up to 100 custom frequencies from 256 Hz - 83 kHz		
Language support	17 user selectable		
Induction	16 induction frequencies		
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		
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) or Li-Ion battery pack (optional)		
Battery life (max)	100 hrs with alkaline 80 hrs with Li-Ion 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)

Induction frequencies
8.01 kHz, 8.192 kHz, 8.44 kHz, 9.82 kHz, 29.4 kHz, 32.8 kHz, 39 kHz, 44.6 kHz, 65.5 kHz, 78.1 kHz, 80.4 kHz, 82.5 kHz, 83.1 kHz, 89 kHz, 131 kHz, 200 kHz

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