



Data Sheet



Echometer IRG 3000

The new fully computerized time domain Echometer IRG 3000 offers unique features for intelligent and automatic cable fault location.

Features:

- fully automatic measuring sequences
 - fully automatic menu-guided operation
 - fully automatic setting of measuring parameters
 - fully automatic cursor settings
 - zoom and scroll function for echometer
 - 3 phase measurement and display
 - voltage protected input for echometer
 - memory for > 100000 echogramms
 - output pulse 20 ... 160 V
 - 200 MHz real time transient recorder or high resolution
 - measuring ranges over 100 km
 - operating system Windows™
 - large colour display
 - keyboard and mouse with wireless remote - control
- Available 19" unit as plug-in unit or as stand alone instrument

H.V. TEST (PTY) LTD

3 Gaiety Ave, Robindale, Randburg, South Africa, 2010 Tel: +27(11) 782 1010 Fax: +27(11) 782 2770
P.O. Box 651287, Benmore, 2010 Email: sales@hvtest.co.za Website: www.hvtest.co.za



Measuring methods:

- Pulse reflection method multicore
- Secondary impulse method SIM with SA 32
- Secondary impulse method SIM DC with SA 32
- Multiple Impulse Method Mim (advanced SIM) with SA 32
- Differential secondary impulse method with SA 32
- Impulse current method with SK 1D
- Decay method with CC 1
- Differential impulse current method with SK 3D
- Differential decay method with SK 3D

Extensions:

- MOhm meter, 3 phase selection via software integrated in IRG 3000
- Combination with VLF test system PHG
- Combination with VLF cable diagnostic system PHG TD and PHG TD / PD

Options

- Large TFT display 15.1 "
- 3 phase test lead MS 25
- 3 phase test lead MS 50
- A4 Colour printer incl. connection cable
- Marker unit
- 19" keyboard with trackball

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Technical data

| | IRG 3000 |
|--|--|
| output voltage of transmitting pulse | 20 V ... 160 V |
| pulse width of transmitting pulse | 20 ns – 1.3 ms |
| voltage withstand pulse echo mode | 400 V AC (50 Hz – 60 Hz) |
| output impedance | 12 Ω - 2000 Ω adjustable |
| measuring ranges (at $v / 2 = 80$ m / μ s) | 10 m – 3 300 km |
| real time sampling rate | 200 MHz, (5 ns) |
| accuracy | 0,1 % |
| resolution | 0.1 m (at $v / 2 = 80$ m / μ s) |
| propagation velocity $v / 2$ | 20 – 150 m / μ s |
| sensitivity of input divider | - 10 dB ... + 60 dB |
| number of echogramme memories | > 100000 |
| colour display, 19 " version | TFT 12.1 " 6U |
| power supply for mains operation | 110 V - 240 V 50 Hz - 60 Hz |
| power consumption max. (without display) | 150 VA |
| operating temperature | 0 to + 50 ° C |
| storage temperature | - 35 to + 60 ° C |
| dimensions of IRG 3000 as plug-in unit | 19 " , width: 483 mm, height: 174 mm, depth: 174 mm Front part 1U, radius: 4U |
| dimensions with 12.1" display and housing | Max. width (front panel) 483 mm, height 174 mm, depth without ground spindle: 365 mm Front part 1 U, radius: 4 U |
| weight IRG 3000 | appr. 7 kg |
| weight display | appr. 5 kg |

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Order instructions:

Please specify in each enquiry or order:

| Echometer IRG 3000 19" version | 413+027 | |
|--|-----------------|--------------------------|
| Delivery includes | Standard | Selection |
| Echometer IRG 3000 without accessories | ■ | |
| Software MS Windows 2000 multi language on CDR (3 pcs.) | ■ | |
| Language: English | | <input type="checkbox"/> |
| Language: German | | <input type="checkbox"/> |
| Language: French | | <input type="checkbox"/> |
| Language: Spanish | | <input type="checkbox"/> |
| Language: Italian | | <input type="checkbox"/> |
| Language: Dutch | | <input type="checkbox"/> |
| Language: Chinese | | <input type="checkbox"/> |
| Software IRG 3000 on CDR | ■ | |
| Software WinZip on CDR | ■ | |
| Virusscan McAfee WIN 2000 English | ■ | |
| Mains connection cable | ■ | |
| Mains connection cable 10 A with plug acc. to German standard | | <input type="checkbox"/> |
| Mains connection cable 10 A with plug acc. to British Standard (BS) | | <input type="checkbox"/> |
| Mains connection cable 10 A with plug acc. to Swiss Standard (SEV) | | <input type="checkbox"/> |
| Mains connection cable 10 A with plug acc. to US Standard | | <input type="checkbox"/> |
| Monitor | ■ | |
| Monitor TFT 12.1" (19" version / 6 U) with connection cables | | <input type="checkbox"/> |
| Monitor TFT 15.1" (19" version / 7 U) with connection cables | | <input type="checkbox"/> |
| Monitor TFT 15.1" (foldable, in drawer 19" / 2 U) with connection cables | | <input type="checkbox"/> |
| Keyboard | ■ | |
| Keyboard and mouse with wireless remote-control PS/2 Windows | | <input type="checkbox"/> |
| Layout of keyboard with remote-control: English | | <input type="checkbox"/> |
| Layout of keyboard with remote-control: German | | <input type="checkbox"/> |
| Mouse pad extra-flat 195 x 235 mm | | ● |
| PC keyboard with trackball 19" – drawer 1 U PS/2 Windows | | <input type="checkbox"/> |
| Keyboard layout: English (Britain) | | <input type="checkbox"/> |
| Keyboard layout: German | | <input type="checkbox"/> |
| Keyboard layout: French | | <input type="checkbox"/> |
| Keyboard layout: English (USA) | | <input type="checkbox"/> |
| Connection cable for test van (cable 4 x 1 mm ² ; 2 m long, without termination) | ■ | |
| Operating manual | ■ | |
| Language: English | | <input type="checkbox"/> |
| Language: German | | <input type="checkbox"/> |

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| Options: | |
|---|--------------------------|
| Fixing device for mouse, adjustable | <input type="checkbox"/> |
| Ink-jet printer colour printing | <input type="checkbox"/> |
| USB - Connection cable printer – PC (USB A on USB B) | <input type="checkbox"/> |
| Megohmmeter, menu guided | <input type="checkbox"/> |
| Software Replay IRG 3000 on CDR | <input type="checkbox"/> |
| USB Transfer Kit | <input type="checkbox"/> |
| Software MS – Excel 2000 OEM German | <input type="checkbox"/> |
| Software MS – Excel 2000 OEM English | <input type="checkbox"/> |
| 19" housing / 8 U; 400 mm deep for 15.1" display | <input type="checkbox"/> |
| Test lead with 25 m length; Type: MS 25 | <input type="checkbox"/> |
| Test lead with 50 m length; Type: MS 50 | <input type="checkbox"/> |
| Ground line 6 mm ² ; 3 m long; with ground terminal 24 mm wide | <input type="checkbox"/> |
| Test lead 3 phase design, with plug LP 3 – IRG 3000 | <input type="checkbox"/> |
| Test lead, fully insulated; 3 phase design, 3 m long, with terminals and fuse | <input type="checkbox"/> |
| Ceramic fuse 1 A quick-blow; switch – off capacity 13.3 kA (4 pcs.) | <input type="checkbox"/> |
| Capacitive coupler up to 70 kV; Type: CC 1-70 | <input type="checkbox"/> |
| Capacitive coupler up to 110 kV; Type: CC 1-110 | <input type="checkbox"/> |
| Capacitive coupler up to 160 kV; Type: CC 1-160 | <input type="checkbox"/> |
| Inductive coupler SK 1D 1 phase design | <input type="checkbox"/> |
| Inductive coupler SK 3D 3 phase design | <input type="checkbox"/> |
| Set of spare parts, economic package (for 2 years of operation) for IRG 3000 | <input type="checkbox"/> |
| Set of spare parts (for 5 years of operation) for IRG 3000 | <input type="checkbox"/> |
| Mains supply: | |
| <input checked="" type="checkbox"/> 110 V ~ to 240 V ~ | |

- Included in standard delivery
- Selectable (please mark with a cross or specify)
- Automatically included, depending on selected item



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