



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 $v / 2 = 80 \text{ m} / \mu\text{s}$)	10 m – 3 300 km
real time sampling rate	200 MHz, (5 ns)
accuracy	0,1 %
resolution	0.1 m (at $v / 2 = 80 \text{ m} / \mu\text{s}$)
propagation velocity $v / 2$	20 – 150 m / μs
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:	
■ 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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