



Time Domain Reflectometer IRG 2000

The time domain reflectometer IRG 2000 is a portable, easy to use, single-phase unit for cable fault pre-location using the Time Domain Reflection (TDR) method on low, medium and high voltage cables. It can also be used on live cables up to 400 V. Further fault location methods are available with the application of the appropriate coupling device. Its measuring ranges enable pre-location on cable lengths from 0 m to 65 km (0 to 213,000 feet).

The IRG 2000 is operated via function keys and is fully menu guided. The LCD colour screen allows up to three waveforms to be displayed at the same time. The unit is supplied with rechargeable batteries and can also be powered directly by mains supply.

Features

- interactive menu-guidance
- measuring range up to 65 km (213,000 ft)
- measuring input voltage proof up to 400 V
- printer connection via RS 232
- memory up to 100 echogramms

Measuring methods

- | | |
|---|------------|
| • Pulse reflection method | |
| • Secondary Impulse Method (SIM) | with SA 32 |
| • Secondary impulse Method (SIM DC) | with SA 32 |
| • Multiple Impulse Method (MIM) | with SA 32 |
| (advanced SIM) | |
| • Differential Secondary Impulse Method | with SA 32 |
| • Impulse Current Method (ICM) | with SK 1D |
| • Decay method | with CC 1 |

Technical data:

Output voltage of transmitting pulse	10...60 V
Pulse width of transmitting pulse	40 ns ... 10 µs
Voltage withstand	400V AC (50/60 Hz)
Output impedance	10 – 250 Ohm
Sensitivity of input divider	0 ... 60 dB
Measuring ranges @ $v/2=80\text{m}/\mu\text{s}$	0 – 65 km (0 – 213,000 ft)
Sampling rate	200 MHz (5ns)
Resolution	0,4 m (at $v/2 = 80 \text{ m}/\mu\text{s}$)
Accuracy	0.2 %
Propagation velocity $v/2$	50 – 150 m/µs
Number of echograms memories	100
LCD – TFT Colourdisplay	320x240 pix. (121mm x 92mm – 6")
Power supply for operation and charging	100-240 V (50/60 Hz)
Operation time of rechargeable batteries	Approx. 5 h
Operating temperature	-20 ... +50 °C
Storage temperature	-40 ... +60 °C
Languages	German, English, French, Spanish, Portuguese, Dutch, Polish, Italian
Type of protection IP54	Splash proof and dust protected
Dimensions	220 mm x 130 mm x 75 mm
Weight	Approx. 1,1 kg

Delivery includes:

- Time domain reflectometer IRG 2000
- Connection cable with crocodile clips
- Earth cable with BNC connector
- Serial cable RS-232
- Software IRG 2000 on USB drive
- Cover bag
- Mains supply cord 2.5 m
- User manual

Options

- Transport case for IRG 2000 for protection during transport and storage

