IRG 2000

BAUR time domain reflectometer

The shortcut to cable fault location

- Easy and quick cable fault location
- Light, compact and manageable
- Main unit for the tried-and-tested pre-location method
- Ideal for integration in measurement systems

The IRG 2000 time domain reflectometer is used to pre-locate cable faults using time domain reflectometry and can be used on low-, medium- and high-voltage cables up to 65 km in length. An integrated voltage filter enables direct measurement on live cables up to 400 V.

Additional pre-location methods are available in combination with a surge voltage generator and various system couplings (e.g. in a BAUR Syscompact 2000).

Parameters can be set for each measurement method via the user interface; the menu navigation supports the operator when carrying out the measurements. The traces are displayed and are easy to evaluate using the function keys. The LC colour display makes it possible to present up to three traces in different colours at the same time.

The IRG 2000 is light, convenient and weather-resistant (splash water and dust protection). The device can be operated with its built-in rechargeable battery or mains connection as required.

Functions

- TDR Time Domain Reflectometry
- If used with add-on devices:
  - SIM/MIM Secondary/Multiple Impulse Method
  - ICM Impulse Current Method
  - Decay method

Features

- Fault location on cables up to 65 km in length
- Single-phase time domain reflectometer
- Fully automated measurement and display of the fault distance
- High measurement resolution thanks to the 200 MHz sampling rate
- Voltage-proof up to 400 V
- Simple, interactive menu navigation in several languages
- Integrated memory for up to 100 measurements
- Printer connection

BAUR GmbH · Raiffeisenstraße 8, 6832 Sulz, Austria · T +43 (0)5522 4941-0 · F +43 (0)5522 4941-3 · headoffice@baur.at · www.baur.eu

Technical data

Pulse voltage	10 – 60 V
Pulse width	40 ns – 10 µs
Voltage-proof up to	400 V, 50/60 Hz
Output impedance	10 – 250 Ohm
Input signal gain	0 – 60 dB
Measurement range	0 - 65 km (at v/2 = 80 m/µs)
Accuracy	0.2%
Sampling rate	200 MHz (5 ns)
Resolution	0.4 m (at v/2 = 80 m/µs)
Velocity of propagation (v/2), adjustable	50 – 150 m/µs
Storage capacity	100 measurements
Display	6″ colour LCD, screen resolution 320 x 240 pixels
User interface languages	English, French, German, Dutch, Italian, Polish, Portuguese, Russian, Spanish

Power supply	
Battery type	NiMH 12 V; 2100 mAh (7 pcs)
Battery life	Approx. 5 h
Charger	100 – 260 V, 50/60 Hz
Ambient temperature (operational)	-20 °C to +50 °C
Storage temperature	-40 °C to +60 °C
Dimensions (W x H x D)	Approx. 220 x 130 x 75 mm
Weight	Approx. 1.1 kg
Degree of protection	IP54
Safety and EMC	CE-compliant in accordance with Low Voltage Directive (2014/35/EC), EMC Directive (2014/30/EC), EN 60068-2-ff Environmental testing

Standard delivery

- BAUR IRG 2000 time domain reflectometer
- Charger
- TDR connection cable 1.5 m, with connection clips
- Earth cable with BNC port
- RS232 cable, series
- Printer software on USB drive
- Protective bag
- Mains supply cord 2.5 m
- User manual

Option

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