

# BAUR Time Domain Reflectometer IRG 3000



Picture of device with the 19" housing option

## Reliable cable fault location with minimum effort

- › Maximum precision with high resolution and high sampling rate
- › One device for all measurement methods
- › Easy menu navigation in 21 languages
- › Quick to learn, no training costs

The computer-supported Time Domain Reflectometer IRG 3000 in combination with the BAUR system software is used for cable fault prelocation in single and three phase cable systems.

With the comprehensive BAUR system software, IRG 3000 can be built into a complete system for efficient cable testing and diagnostics.

### Features

- Pre-programmed measuring sequences, fully automated measurement and display of the fault distance
- Storage for more than 100,000 measurements
- Three-phase measurement and display
- Level of initial impulse: 20 – 160 V
- View range: 10 – 1,000 km
- Impulse reflection method (TDR)
- Secondary/Multiple Impulse Method (SIM/MIM)
- SIM/MIM with DC voltage (SIM/MIM DC)
- Impulse current method (ICM)
- Decay method
- Differential impulse current method
- Differential decay method
- Resistance measurement (option)
- Can be combined with BAUR cable testing and diagnosis systems: All measurements are controlled via the BAUR system software.  
VLF cable test: with PHG 70/80;  
Dissipation factor and partial discharge measurement: with PHG 70/80 TD PD or viola 19" (for installation in the cable test van)

Available measurement methods	Required equipment
Impulse reflection method (TDR)	—
Secondary/Multiple Impulse Method (SIM/MIM)	System coupling SA 32 and surge voltage generator SSG
SIM/MIM with DC voltage (SIM/MIM DC)	System coupling SA 32 and surge voltage generator SSG
Decay method	Surge voltage coupling CC 1 and VLF test generator PHG or high voltage testing device PGK
Impulse current method (ICM)	Surge current coupling SK 1D
Differential impulse current method	Coupling SK 3D and surge voltage generator SSG
Differential decay method	Coupling SK 3D with VLF test generator PHG or high voltage testing device PGK
Resistance measurement (option)	—

### Technical data

Pulse width	20 ns – 1.3 ms
Output voltage (transmit pulse)	20 – 160 V
Output impedance	12 – 2,000 $\Omega$
Sampling rate	200 MHz (5 ns)
Electric strength	400 VAC, 50/60 Hz
Power supply	100 – 260 V, 50/60 Hz
Power consumption	Max. 280 VA
View range	10 m – 1,000 km
Resolution	0.1 m (at $v/2 = 80 \text{ m}/\mu\text{s}$ )
Runtime factor $v/2$	20 – 150 m/ $\mu\text{s}$
Input signal amplification	-10 to +60 dB
Accuracy	0.1%
Display	TFT colour display 15.1", 6 HE
Weight: IRG 3000 / Display	approx. 7 kg / approx. 5 kg
Dimensions (W x H x D)	
as plug-in unit	19", 483 x 174 x 365 mm 1 HE (front), 4 HE (rear)
with housing	19", 483 x 318 x 365 mm 8 HE (front)
Storage space	> 100,000 (hard disk limit)
Ambient temperature	0 to +50 °C
Storage temperature	-25 to +60 °C
Conforms to CE	IEC 61010-1, EN 61000-4-2, EN 61000-4-4

Software available in

English, Arabic, Chinese (CN), Chinese (TW), Danish, German, Finnish, French, Greek, Italian, Korean, Malay, Dutch, Norwegian, Polish, Portuguese, Rumanian, Russian, Swedish, Spanish, Czech



IRG 3000, integrated in the cable test van

### Standard delivery includes

- Time Domain Reflectometer IRG 3000
- Software MS Windows XP ML on CDR
- Software IRG 3000 on CDR
- Monitor TFT 15.1", 6 HE
- Keyboard and mouse
- Connection cable for cable test van (4 x 1 mm<sup>2</sup>, 3 m with free cable end)
- Mains connection cable (2.5 m)
- User manuals

### Options

- Menu-controlled megaohmmeter
- 19" housing, 8 HE, 400 mm depth
- Pre-test lead (low voltage), three-phase, Type: MS 25 (25 m)
- Pre-test lead (low voltage), three-phase, Type: MS 50 (50 m)
- Test lead, three-phase, with connection terminals (3 m)