



▶ Application

SWG-12/1100RP portable cable fault location system is a complex solution for safe, fast and easy locating a faulty place on low and medium underground voltage cables. It includes a powerful high-voltage unit, which has a test, burn and surge generation modules, and a time-domain reflectometer for locating faults on cables.

▶ Description

The high-voltage unit of the system provides with high-power up to 1100 Joules surges at 3; 6 and 12 kV ranges. At each range, the output voltage is smoothly adjustable. The rate of surge waves can be smoothly adjusted. The single manual shot option is also included. The DC output mode is provided for quick fault diagnostics. The 100 mA burn mode is available.

Digital impulse reflectometer (TDR) RIF-9P provides you with 10.4-inch bright high-contrast TFT display with touchscreen. The 800 x 600 pixels resolution makes the picture sharp. The touchscreen allows an operator navigate through the menu fast and easy. An alternative way of navigation is included. It is provided with a control knob.



RIF-9P integrates a multiple ways of fault prelocation. It can be used either as a standalone device in TDR mode or in a conjunction with HV-module, working in arc reflection mode.

RIF-9P has USB interface. The package content

includes software for PC (optional), which allows working with saved reflectograms. The firmware can be easily updated through USB interface by inserting a flash drive.

► Technical specifications

GENERAL parameter	Value
Input voltage, V	230 ± 23
Frequency, Hz	50 ± 1
Power consumption, kVA, max	2.0
Dimensions (W × H × D), mm	731 × 1120 × 533
Net weight, kg	113
HV-module parameter	
⚡ TESTING MODE	
Output DC voltage, kV	0 – 12
Output DC current, mA	1 / 10
🔥 BURNING MODE	
Output DC voltage range, kV	0 – 12
Output DC current range, mA	0 – 100
⚡ SURGE MODE	
Ranges, kV	3 / 6 / 12
Surge rate, s	3 – 15 or single shot
Max. output energy, J	1100

TDR parameter	Value
Distance measurement ranges, m @ v/2 = 100 m/μs	60/120/ 250/ 500/1000/2000/5000/ 10000/20000/50000/120000
Resolution, m	0.5 @ v/2 = 100 m/μs 0.4 @ v/2 = 80 m/μs
Sampling rate, MHz	200
Gain, dB	-33 – 104
Output impedance (10 Ω steps), Ω	10 – 500
Propagation velocity (v/2), m/μs	50.0 – 150.0
Averaging reflectograms number, max	64
Time domain accuracy, %	0.2 of FS
Pulse amplitude, V	45
Pulse width, ns	10 – 100 000
Operation modes	TDR (reflection measurement) ARC (arc-reflection)
Control	Touchscreen and control knob
Connectivity	RS-485, USB
Internal data storage	4 Gb (not less than 1000 reflectograms with data)
Display	10.4", 800 x 600 TFT, touch-sensitive

► Package contents

Component	Quantity
SWG-12/1100R	1
Bag for cables	1
User manual	1
Connecting cables set (may vary on customer's demand)	6 m each

► Accessories

Component	Quantity
LFG-50 Audio frequency generator	1
P-900 Surge wave locator set	1

