

# Digital **RIF-9P** impulse reflectometer



#### Application

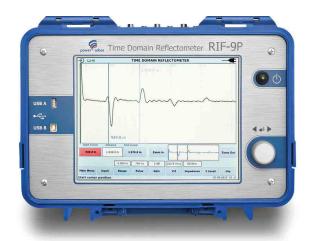
Battery powered digital impulse reflectometer (TDR) RIF-9P designed for determining the distance to a fault in communication and power cables.

Digital impulse reflectometer RIF-9P allows:

- Determining the distance to a fault or discontinuity in symmetric and asymmetric cables using a location (time domain reflection) method
- Measuring the length of a cable (including those wound on a drum) or distance to a fault or a short circuit
- Storing and processing the results of measurements both internally or using a supplied PC software
- As part of a Cable Test Van, determining the distance to a fault or discontinuity in cables with length of up to 100 km for all possible fault types without the need of preliminary full cable sheath burning

#### Description

- RIF-9P provides you with 10.4-inch bright highcontrast TFT display with touchscreen. The 800 × 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 (e.g. Cable test van or Surge wave generator), working in arc reflection (ARC), impulse current (ICE) and decay modes. A high-capacity internal battery allows working up to 8 hours.
- RIF-9P has both RS-485 and USB interfaces. The package content includes software for PC (optional), which allows working with saved reflectograms. The firmware is easily updated through USB interface by inserting a flash drive.

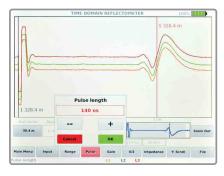


#### **CABLE FAULT LOCATION**



## Technical specifications

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 $\Omega$ steps), $\Omega$	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
Propagation velocity (v/2) resolution, m/us	0.1
Pulse width, ns	10 – 100 000
Operation modes	TDR / ARC / ICE / Decay
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
Internal battery	12 V (8 hours of operating when fully charged)
External power adaptor	Input 230 V 50 Hz Output 24 V DC
Power consumption, W, max	36
Dimensions (W $\times$ H $\times$ D), mm	366 × 178 × 270
Net weight (with internal battery), kg	8.0



RIF-9P workplay screenshot

### **CABLE FAULT LOCATION**