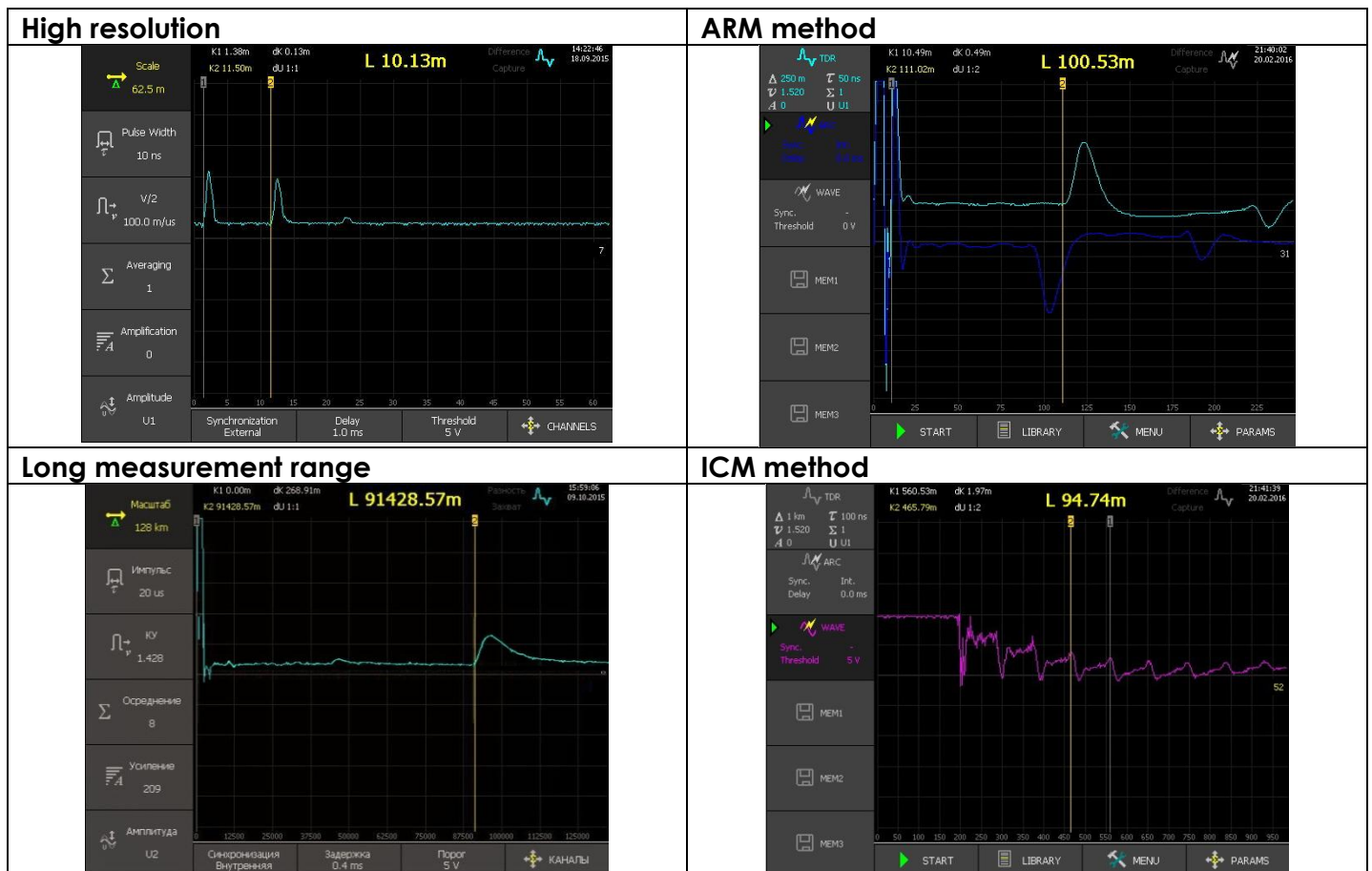




Application Area

TDR RI-407 is intended for the following measurements on power cable lines:

- cable length measurement and cable integrity tests;
- measurement of the distance to the heterogeneity of the cable impedance or low-resistance fault, using **TDR** method;
- measurement of the distance to the high-resistance fault, using the Arc Reflection Method (**ARM**) in complex with the high-voltage pulse generator (HVPG);
- measurement of the distance to the high-resistance fault, using the Impulse Current Method (**ICM**) or **Decay** Method in complex with the high-voltage pulse generator (HVPG);
- measurement of the velocity factor of the line at a known length;



Specifications and Characteristics

- **Implemented measurement methods:** TDR, ARM, ICM, DECAY;
- **Display:** color 10.4" TFT 640 x 480 pixels, LED-backlight 400 cd/m²;
- **Distance measurement range, PF=1.500:** 1 m ... 256 km;
- **Pulse Width:** 10 ns ... 100 us;
- **Pulse Amplitude:** 18 V, 86 V (on open circuit);
- **Distance measurement relative error:** 0.01% ... 0.2% (depending of sub-range)
- **Distance measurement absolute error:** 0.125 m (on sub-ranges <= 1 km) ... 32 m (on 256 km sub-range)
- **Effective sampling rate:** 800 MHz;
- **Input impedance:** 75 Ohm (fixed);
- **Attenuation overlap:** 73 dB;
- **Asynchronous noise suppression:** averaging 1 ... 64 times;
- **Propagation Factor(PF) range:** PF=1.000 ... 3.000;
- **Synchronization ARM:** external (TRIG), internal (delay 0 ...50 ms, step 0.2 ms);
- **Synchronization ICM, DECAY:** threshold level (-165 V ... +165 V, step 2 V);
- **Non-volatile internal memory:** >1000 waveforms, 500 PF values;
- **Data exchange:** via USB-Flash;
- **File types:** waveform (*.tdr, up to 8000 px), screenshot (*.jpg);
- **User interface language:** Russian/English/ your language on request;
- **Connectors:** TDR (BNC), TRIG (BNC), WAVE (BNC), USB-A;
- **Power:** AC 12 V, built-in Li-Ion battery (7,2 ± 0,7)V 7,0A;
- **Continuous running from the battery:** at least 6 hours. Continuous running via AC adapter is not limited;
- **Overall dimensions:** 363 mm * 295 mm * 170 mm;
- **Weight:** 3.7 kg;
- **Working conditions:**
 - operating temperature range from -20 to 40 °C;
 - relative humidity 98%, at 25 °C;
 - transportation and storage conditions from -50 to 50 °C.

Delivery Contents

	Quantity
Cable Fault Locator TDR RI-407 (tech. spec. 4221-009-23133821-15)	1 item
AC Adapter 12 V	1 item
Connecting cable 75 Ohm, 3 m, BNC.M - «Alligator clip» with a working width of 25.4 mm	1 item
Connecting cable 75 Ohm, 1 m, BNC.M-BNC.M	2 items
User Manual (tech. spec. 4221-009-23133821-15)	1 item
CD-ROM with software	1 item
Accessories bag	1 item