

Tracker Pro V3

New generation touch screen TDR for district heating network faultfinding

The **Tracker Pro V3** is a new version of the Tracker Pro - the existing on the market multipurpose metallic time domain reflectometer (TDR). The crucial innovation in the new model is the extended testing range up to 16km on COAX cables or 19km while troubleshooting of district heating alarm systems.

The Tracker Pro V3 combines the latest technology and user-friendly operation, creating a versatile and accurate TDR. It uses square pulse widths with very fast rising and falling edges. This unique capability creates high frequencies that allow for the most accurate reading of small faults in the network even at very short distances less than 1m from the source of the test pulse. At the same time, an extended testing range enables the user to see faults on long distance cables and district heating pipeline networks.

Using time domain reflectometry, or cable radar, the TDR transmits a signal down the tested conductor. Impedance discontinuities along the length of the conductor reflect some or all of the signal energy back to the instrument. These reflections are measured and displayed on the Tracker Pro's color LCD touch screen as both a waveform and a numeric distance to the fault.

The Tracker Pro V3 is a product of Springbok Instruments, USA, whose founders created RiserBond almost three decades ago - a world known brand of metallic cable TDRs. As compared to all existing TDRs, Springbok Instruments introduces some revolutionary new features as standard: a high resolution color touch LCD screen and the Tracker Store - a unique system of storing up to 60 measurements, each file being a full waveform in all the available pulse widths regardless of what is on screen.

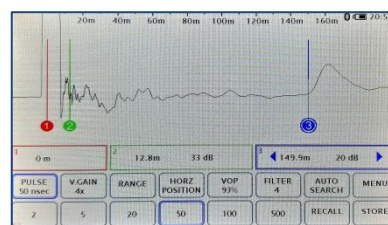
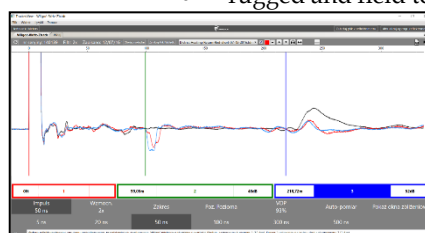
PC compatible Tracker View software is also a standard feature provided with Tracker Pro V3. It allows the user to work from the comfort of a truck or office with the same functionality as if having been on a live network. It means a minimum time of a customer's interrupted automated monitoring service as a network technician simply has to remove the alarm system under test from service, plug the TDR into the conductor under test, touch "Store" and, in less than 5 seconds, return the system under test to service. At this point, the technician can recall the stored record of the tested network and study its signature on the TDR itself, write down any comments related to the measurement or download the measurement data to a laptop. In this case, much more enhanced functionality of the testing system can be achieved by using the waveform as a reference with a perspective of future comparison with the state of defect on the same part of the network. New functionality of Bluetooth wireless communication added to the system allows the user to download the data on site onto a tablet or a smartphone with a purpose of having a quick external data bank or immediate transferring of data to the office for analysis or comparison.

The Tracker View allows the user:

- To download, manipulate, save, print and email Tracker Pro stored waveform files from field network testing.
- To compare historical data with current measurements on the same screen at all available pulse widths.
- It also allows a port into the internet for free updating the Tracker Pro's operating system.

Key Features:

- the most modern TDR technology based on high frequency energy test pulses
- locates faults (cable impedance discontinuities) for most of metallic cable types
- long testing range up to 16km on coax cables or 19km on district heating pipelines
- detects faults at very short distances - less than 1m with a 5ns pulse width
- high resolution large color touch LCD screen
- Auto-Search mode for ease of operation
- IFD (Intermittent Fault Detection) feature
- three measurement cursors and multiple marking system
- screen comparison of two measurements (live + Memory or Memory1 + Memory 2)
- intuitive interface combined with accurate diagnose & locating of multiple events
- unique „one-touch storage of all pulse width" Tracker Store System for 60 network tests
- Bluetooth 4 and USB connectivity to tablets and smartphones
- splash proof USB connection and Tracker View PC software at standard delivery
- updates of the Tracker Pro's operating system & Tracker View software via internet for free
- increased operating time of the internal battery exceeding 9 hours in standard conditions
- rugged and field tested case



Tracker Pro V3

The most modern TDR designed to locate multiple events along district heating pipelines

Typical field applications for Tracker Pro:

- district heating network troubleshooting
- coax cable TV troubleshooting
- telecom copper cable faultfinding
- LAN network troubleshooting
- LV power cable faultfinding
- and many more....



Technical Data

Distance Accuracy:	2-50 ns pulses – 0,5ns resolution, max distance 3,962 meters @ 85% VOP 100 - 500 ns pulses - 1 ns resolution, max distance or 7,930 m @ 85% VOP 1000 - 2000 ns pulses - 2 ns resolution, max distance 15,850 m @ 85% VOP)
Display:	7" LCD color touchscreen display (800 x 480)
Output Signal:	Pulse Widths: 2 nsec, 5 nsec, 20 nsec, 50 nsec, 100 nsec, 300ns, 500 nsec, 1000ns and 2000ns <i>Note, due to high frequency energy of the pulses, the min. effective test range of 2ns or 5nsec pulse is less than 1m!</i>
Power:	Battery: Internal, rechargeable, 8 cell 4200 mAh Nickel metal hydride
Charging source:	External 18VDC transformer, 1000mA
Operating time:	greater than 9 hours, continuous in standard brightness display mode
Horizontal Resolution:	3cm
Vertical Resolution:	14 bits at 193 dots
Internal Memory:	Store up to 60 multi-pulse waveforms files in the instrument's memory
Input Protection:	400 V (AC + DC) from DC to 400 Hz, decreasing to 10 V at 1 MHz
Filtering:	1x, 2x, 4x, 8x, x16, 32x, 64x
Vertical Gain:	1x/4x, 2x/8x, 4x/16x, 8x/32x, 16x/64x, 32x/128x
VOP Range:	40% - 99%
Connectivity:	USB port, internal Bluetooth 4 modem
Weight:	1,7 kg
Physical dimensions:	width 21.4cm x depth 17.2cm x height 9.8cm
Operating temperature:	0° C - 50° C
Storage temperature:	-20° C - 60° C
Humidity:	95% maximum relative, non-condensing

Scope of Delivery:

Tracker Pro V3 TDR, BNC-Crocodile clip 2m test cable, mains charger, Tracker View PC software, USB cable, 75 Ohm BNC - 50 Ohm F adapter, magnet, carry bag, instruction manual

