Troubleshooting Electronics in Industry 4.0 Environments
R&S®Scope Rider – a multifunction troubleshooting device

Challenge

A smart factory uses modern automation systems, Internet of Things technology and realtime analysis to achieve a new level of flexibility and low production costs, even for minimum production quantities. Troubleshooting electrical and electronics systems in the Industry 4.0 requires flexible test and measurement equipment that can adapt to various needs.
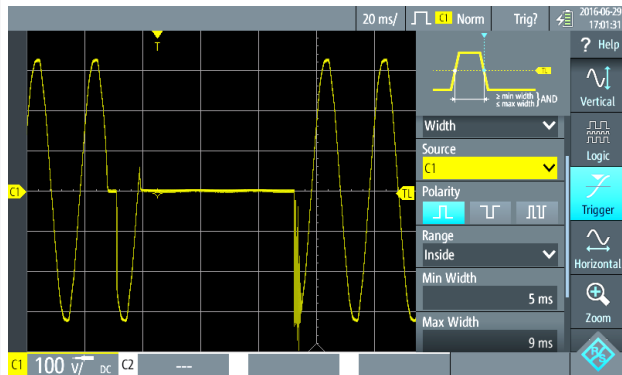
Solution

The R&S®Scope Rider handheld oscilloscope provides the functionality of 8 instruments in a compact, robust, portable device. It features isolated inputs for hassle-free and safe measurements on the electrical distribution network inside a manufacturing plant. It also comes with an integrated multimeter (two-channel model). Advanced analysis functions allow for troubleshooting all kinds of problems in Industry 4.0 environments.
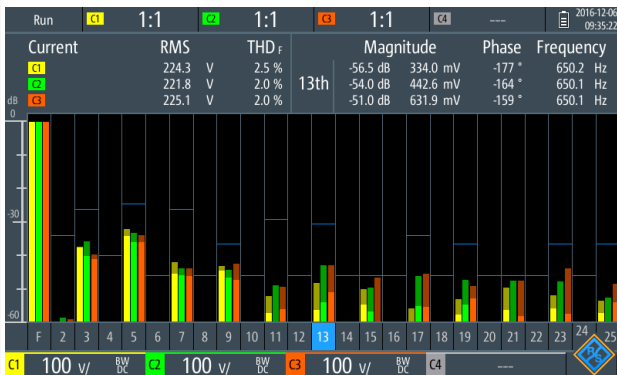

Your benefit	Features
Rugged two/four-channel isolated input oscilloscope with laboratory-class performance	▪ 60 MHz to 500 MHz bandwidth ▪ 10-bit ADC with 5 Gsample/s, 50 000 acquisitions/sec ▪ Isolated input channels: CAT IV 600 V/CAT III 1000 V ▪ Advanced triggering capabilities ▪ 33 automatic measurement functions ▪ IP51 housing that meets military requirements
8-in-1 functionality	▪ Laboratory-class oscilloscope ▪ Protocol analyzer (I²C/SPI, UART, CAN/LIN, CAN-FD, SENT) ▪ 8-bit logic analyzer ▪ Multimeter with 12 measurement functions (two-channel model) ▪ Data logger ▪ Spectrum analyzer ▪ Four-channel harmonic analyzer ▪ High-resolution frequency counter
Designed for ease of use	▪ 7" capacitive touch display ▪ Easy parameter adjustment with multifunction wheel ▪ Wireless LAN remote control via web interface

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Advanced signal capture capabilities

Advanced trigger functions to isolate the event of interest. Combined with the history function, long-term monitoring and capturing critical events is easy.

Built-in multimeter

The R&S®RTH1002 two-channel model features an integrated multimeter with 12 different measurement functions.

Popular options/accessories

Software options

History/segmented memory	R&S®RTH-K15
Advanced triggering	R&S®RTH-K19
Harmonics analysis	R&S®RTH-K34
Wireless LAN	R&S®RTH-K200 R&S®RTH-K200US
Web interface remote control	R&S®RTH-K201

Passive probes

500MHz, 100:1, isolated, 600 V CAT IV, 1000 V CAT III (3540 V CAT 0)	R&S®RT-ZI11

Current probes

20 kHz, 2000 A, AC/DC	R&S®RT-ZC02
100 kHz, 30 A, AC/DC	R&S®RT-ZC03

Accessories

PT100 temperature probe	R&S®RT-ZA12
Accessory extension set for R&S®RT-ZI10/ R&S®RT-ZI11 passive probes	R&S®RT-ZA21
Replacement lead set	R&S®RT-ZA22
Soft carrying bag	R&S®HA-Z220
Hard shell protective carrying case	R&S®RTH-Z4
Car adapter	R&S®HA-Z302
Battery charger for lithium-ion battery	R&S®HA-Z303
Replacement lithium-ion battery pack	R&S®HA-Z306

Languages supported: English, German, French, Spanish, Russian, simplified and traditional Chinese, Korean and Japanese.

Harmonics analysis function on up to four channels

Harmonics analysis with magnitude, phase and frequency measurements for up to 64 harmonics and automatic limit testing.

Wireless LAN remote control

An integrated wireless LAN hot spot allow easy remote control directly from the web browser – with any notebook or tablet.