

Combines the  
Worlds of  
Automation and  
Testing

# W 434 PRO



Automotive

Transportation

Aerospace

Factory Automation



The space-saving test system **W 434 PRO** can be flexibly embedded at control- (IO) or network-level (PROFINET, Ethercat or Modbus) into automation systems. An integrated, robust industrial PC provides the test data and takes over control for test procedures where performance and safety are important. Different combinations of low voltage and/or high voltage generators up to 1,500 Vdc and 1,060 Vac and an RLC measuring bridge provide optimal conditions for test applications in the connector manufacturing or automotive industries. In the case of changing test specification, only a software update is needed.

## ■ Testing and Measuring Performance

<b>Continuity Test</b>	<ul style="list-style-type: none"> <li>· Lower bound 1 Ohm</li> <li>· Four Terminal Measurement down to 10 mOhms</li> <li>· Programmable current sources up to 1 A/max 30 W</li> </ul>
<b>Insulation, Hi-Pot, DC and AC ARC Test</b>	<p><b>Version with HV DC/AC</b></p> <ul style="list-style-type: none"> <li>· Upper limit typically 10 GOhms, up to 500 MOhms</li> <li>· 1,500 Vdc/1,060 Vac programmable</li> <li>· ARC detection with unique voltage and slew rate recognition</li> </ul>
<b>Insulation, Hi-Pot and DC ARC Test</b>	<p><b>Version mit HV DC</b></p> <ul style="list-style-type: none"> <li>· Upper limit typically 10 GOhms, up to 500 MOhms</li> <li>· 1,500 Vdc/1,060 Vac programmable</li> <li>· ARC detection with unique voltage and slew rate recognition</li> </ul>
<b>Insulation Test</b>	<p><b>Version mit LV</b></p> <ul style="list-style-type: none"> <li>· Up to 100 MOhms</li> <li>· 48 Vdc programmable</li> <li>· Programmable current sources up to 1 A/max 30 W</li> </ul>
<b>Component Test</b>	<ul style="list-style-type: none"> <li>· Resistors 1 Ohm to 500 MOhm from 10 mOhms (Four Terminal Measurement)</li> <li>· Capacitances 1 µF to 10 mF</li> <li>· Dioden/Zener diodes Test of forward, reverse and Zener voltage</li> <li>· Transistors</li> <li>· Twisted-Pair and Shield Test from 10 pF to 10 nF Checks pair inversion and shield integrity</li> </ul>
<b>Component Test</b>	<p><b>Mit RLC Option</b></p> <ul style="list-style-type: none"> <li>· Kapazitäten from 100 pF to 10 mF</li> <li>· Induktivitäten from 1 µH to 1 H</li> </ul>

Typical values, valid at the front panel of the tester without adaptation at 25° C and a relative humidity less than 60 %

## ■ Functional Test

- Supply of the UUT with programmable voltages up to 60 Vdc/25 Vac
- Emulation of the switching processes
- Voltage measurement 0 to ( $\pm$ ) 500 V, frequency DC to 1 kHz
- Reproduction of the functional environment, e.g. by electronic loads, frequencies etc.
- Functional test of push buttons and switches
- Import of characteristic curves of external devices and display/interpretation by software

**Software** · CEETIS smart or CEETIS as option for functional test

## ■ Switching Matrix

**Modules for Wiring Test** · Versions for voltages up to 1,000 Vdc/750 Vac and up to 1,500 Vdc/1,060 Vac  
 · Various output connectors available

**Modules for Functional Test** · Power modules for voltages up to 60 Vdc/25 Vac, current up to 3 A  
 · Separate high-current module for current up to 25 A, voltages up to 25 Vdc/25 Vac

## ■ Safety

- Non-hazardous output voltage of the high voltage generators due to certified current limitation to 1,95 mAdc, 3 mArms (according to EN 50191 max. 12 mAdc, 3 mArms)

## ■ Further Details

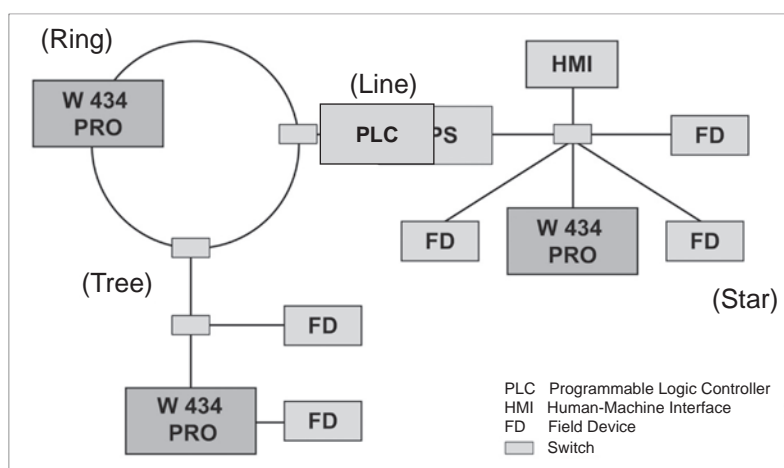
**PC/Interfaces**

- Integrated, compact Industrial-PC with 4 GB RAM, 64 GB SSD, Windows Operation System
- Ethernet interface for setup, programming via remote desktop connection or access to a corporate network
- Interface for communication with PROFINET, EtherCat or Modbus (optional)
  - Selection of a test project
  - Test control (Start, Stop, Abort)
  - Exchange of status information and
  - Send test result (Pass, Fail, Abort)
- Control interface (optional) for communication with automation via IOs
- Software-controlled integration of external power supplies or measuring devices via LAN
- Integration into customer specific ERP-Systems
- Integrated, fixed voltage sources up to 3 A/up to 28 Vdc or external supplies

**Dimensions**

- Portable 19 inch enclosure
- W 434-2: 5 U with max. 640 test points, W x D x H (mm): 450 x 550 x 235
- W 434-3: 9 U with max. 1,664 test points, W x D x H (mm): 450 x 550 x 410

**Power Supply** · 100 to 230 Vac, 50 to 60 Hz, max. 800 VA



W454 PRO – Integration options in various Ethernet topologies



W 434 PRO - rear view