

# Zth test station

L15904.55.01

The Löhnert Elektronik Zth test station is used to measure temporary thermal resistances on power modules.



Industrial PC

Connection panel

Löhnert supply unit

Löhnert safety subrack

DVM Keysight 34980 Basic unit

Schuster Elektronik

HPZ 773 Measuring device

Schuster Elektronik

LPZ 773 Measuring device

Löhnert pneumatic unit

Product information

The Löhnert Elektronik Zth test station is designed for docking to an adapter system via the VPC G10 interface. The two Schuster Elektronik Zth measuring devices are used to determine thermal impedances on power semiconductors.

The Löhnert integrated power supply and pneumatic unit in space-saving 19 inch format delivers the power and pneumatic supply via the VPC G10 interface.

The Löhnert safety subrack is used to control safety-relevant components of the test station. The safety subrack monitors and evaluates these components such as the 3 built-in safety switches on the control cabinet doors. It also evaluates the state of safety signals from the docked adapter system, such as additional safety switches, emergency stop buttons, etc.

The built-in DMM Keysight measuring system with integrated multiplexer and relay card is capable of measuring the current and voltage on up to 40 switched channels.

The drivers for the control of the Schuster Elektronik HPZ and LPZ measuring devices were programmed and developed at Löhnert.

A comprehensive self-test of the HPZ and LPZ measuring devices was programmed via LabWindows CVI. This is achieved using a LoadBoard that simulates a measuring cycle. The voltages applied to the MOSFET switches and photovoltaic relays installed in the HPZ and LPZ are established and the measuring devices subject to a comprehensive self-test.

## Technical data:

Control cabinet:	19 inch format
Rated voltage	3x 400V / 50Hz
Rated current:	approx. 32A
Power:	approx. 22kVA
Fuse:	32A
Control voltage:	24V DC
Connection:	32A CEE
Industrial PC:	19 inch Stonehard i7-3770, 3.4GHz
Monitor:	ProLite 22 inch touch LED monitor
Löhnert 19 inch format:	Supply unit L14125.53.02.xx.xx.xx.xx Safety subrack L15138.53.01 Pneumatic unit L14126.58.01.01

DVM Keysight:	34980 Basic unit 34921 40-channel multiplexer card 34937A 32-channel switch card
Interface:	Virginia Panel Corporation G10
LoadBoard:	HPZ and LPZ 773 measuring systems self-test Tray holder above the VPC G10 interface
Schuster Elektronik HPZ 773 High Power Zth measuring device:	<p>Setting parameters:</p> <p>Measuring current I1: 1...2000mA, max. 5V Resolution: 1mA Accuracy: 0.1 % of setting value <math>\pm</math> 1mA</p> <p>Measuring current I2: 1...1000mA, max. 5V Resolution: 1mA Accuracy: 0.1 % of setting value <math>\pm</math> 0.5mA</p> <p>Measuring current I3: 1...100mA, max. 5V Resolution: 1mA Accuracy: 0.1 % of setting value <math>\pm</math> 0.1mA</p> <p>Measuring current I4: 0.5mA, max. 5V Accuracy: 0.1mA</p> <p>Load current: 1...600A (internal) Resolution: 0.1A Accuracy: 0.5 % of setting value <math>\pm</math> 0.5A</p> <p>Measurement parameter:</p> <p>Load current: 0...600A (internal) Resolution: 0.1A Accuracy: 0.5 % of actual value <math>\pm</math> 0,5A</p> <p>Voltage (5 channels): 0...5.000V Resolution: 0.1mV Accuracy: 0.1 % of measured value <math>\pm</math> 1mV</p>
Schuster Elektronik LPZ 773 Low Power Zth measuring device:	<p>Setting parameters:</p> <p>Measuring current:</p> <p>(2 sources): 1...100mA, max. 5V Resolution: 1mA Accuracy: 0.1 % of setting value <math>\pm</math> 0.1mA</p> <p>Load current:</p> <p>(2 sources): 1...100A</p>

Product information

Resolution: 0.1A  
Accuracy: 0.5 % of setting value  $\pm$  0.5A

Measurement parameter:

Load current: 0...100A (internal)  
Resolution: 0.1A  
Accuracy: 0.5 % of actual value  $\pm$  0,5A

Voltage

(2 channels): 0...5V  
Resolution: 0.1mV  
Accuracy: 0.1 % of measured value  $\pm$  0.1mV

Dimensions (mm): approx. 800 x 1400 x 2150 (W x D x H)

Weight: approx. 400 Kg

Product information