System- und Messelectronic GmbH

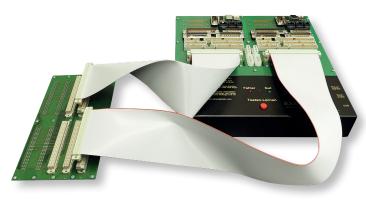
MCT 192 Cable Tester

- 50 industrial connectors
- · connector board can be exchanged for grid board
- 192 high speed measuring channels
- backplane and switch test
- · auto-learn
- · compact and robust metal housing
- USB-interface
- · in-Line use via hardware or external software
- · user-friendly Windows-software
- · test record
- print out of error messages
- can be calibrated

For more than 40 years we have been developing, producing and selling automatic test systems in line with market requirements. Since 1994 we have been the German market leader in In-circuit-, Functional and combinational test systems. We also offer a universal, easy-to-use cable tester which can be calibrated.

Applications

A defective cable, which often costs less than a Euro, can often cause serious damage. In order to grant from the start that the cables work properly and not to search for defects later when it is more expensive, the cable tester is used for testing computer cables, connecting cables in mechanical engineering and industrial plants as well as medical engineering or in home entertainment and household products.



Cable tester MCT 192 in backplane test



MCT192 Cable Tester

Within seconds our high-speed cable tester tests multi-wire cables for short-circuits and interrupts. It is easy-to-use and offers low power-consumption. The unit turns off automatically when it is not used any longer. Its massive metal housing is made of 1.5 mm steel plate and has compact dimensions. Therefore it is very sturdy and cannot easily be upset although it weighs less than 1 kg.

Multi-Contact Board

Its multi-contact board is equipped with a variety of contacting sockets and connectors common in electric industries. Fixturing therefore only seldom becomes necessary. As test current is as low as about $105\,\mu\text{A}$, the connectors we use work about 50 times longer than specified. You can also test cables with more than 2 connectors and complete backplanes or switches in different conditions.

Measuring Method

The cable tester checks the connections of the cable to be tested by stimulating one channel with low and all others with high. The measuring result is then compared with the nominal wiring. Each pin is tested against all others.

This method checks if there is a short-circuit (one connection too much) or an interrupt (one connection is missing).

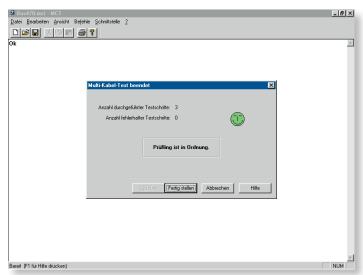
The cable tester can be used stand-alone as well as computer-controlled with a PC. You can also download a cable test program from your PC to the cable tester. Then you can test at another workplace, independent of your PC.

Programming in Stand-Alone-Operation

Programming is very easy and is done by Autolearn on a test item which is known to be good (This takes about 2 seconds). You get a message about the test result (Good or Faulty) either as an acoustic signal or optically via LED. After a faulty test, the short-circuit or interrupt can be localised manually by a search-probe.

Programming on the PC

The software which comes with the unit can display the number and kind of learned connections on the control computer. Wiring is learnt from a test item which is known to be good, is displayed in a wiring list and saved (This takes about 2 seconds). Thus you can use it for testing other cables of this type. Defects are displayed by an optical signal and a fault protocol. You can also print out a fault- or good-protocol. By changing you can also test complete backplanes or switches in different conditions. The test must then run in several



steps. When programming a test you are guided by the menu: The software tells you which connectors you have to use. In this test the software also creates a fault record which tells exactly how many faults occurred and where.

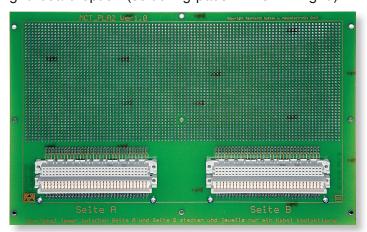
Connector Types Provided:

Sub-D 9 poles, 15 poles, 25 poles, 37 poles (male and female each), male multi-point connectors 16 poles, 20 poles, 26 poles, 34 poles, 50 poles, USB-connector, *IE & OE Spectorial Poles* (male and tice! 11/2022

female), PC-drive connector, Western connector (4, 6 and 8 poles). If you miss a connector, you can plug on a cross connector.

Grid Board

In case you use connectors which are not supplied on our multi-board, you can mount and wire them on the grid board option (soldering pads in 2.54 mm grid). If



needed, we provide a Gerberfile and DXF-file for your own development of your special connectors.

Control Board

The control board is often used at automated test stations. It can be controlled and read out via TTL in- and outputs; integration with your own test software is easy.



What Comes with the Cable Tester:

Cable tester, search probe, cable for serial interface, plug-in mains supply, software for WIN2000®, WIN XP®, WIN Vista®, WIN 7®, WIN 10®, WIN 11®, manual

Technical Data:

Dimensions: 280 mm x 272 mm x 60 mm

Weight: <1 kg

Test voltage / current: 5V TTL, $105 \mu A$

Voltage supply: USB Plug-in mains supply 230 VAC

Computer interface: USB

Fault finder: via searchprobe
Test speed: <1 s for 192 channels

IE & OE Specifications subject to change without prior notice! 11/2022