

Cable Harness Test Systems

IDEAL SOLUTION FOR SMALL & MEDIUM-SIZED CABLE HARNESS MANUFACTURERS



LOW COST OFF-THE-SHELF TEST SYSTEMS

FROM 64 TO 512 TEST POINTS

FAST OPERATION

TEST MODULE DESIGN & PRODUCTION

SUPPORT

Company Introduction

Equip-Test is one of the leading suppliers of Test Equipment in Europe. The Management, Sales and Manufacturing headquarters of the Equip-Test Group is in Budapest, Hungary. Furthermore, sales offices are installed in Germany, Poland, Czech Republic, Slovakia, Romania, Ukraine and Serbia.

Among other products, Equip-Test manufactures price-competitive, fast and efficient Cable Harness Test Systems.

Equip-Test has developed a PLC-controlled Connector Testing System with a unique hardware solution. You can also find this system in our catalog too.

We guarantee your success and satisfaction and this to a fair and competitive price.

Equip-Test: Simply the best!

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Mini Cable Tester - MCT 100

Low Cost

This system is ideal for cable harness manufacturers with simple cables! After the „golden“ sample cable has been taught to the system, then all manufactured cables will be compared with this golden sample! According to customers needs any kind of JIG or test module can be manufactured by Equip-Test for this system.

Test Points Count:

2 x 64 pcs, expandable up to 2 x 128 TP's
(64 measuring point /connector)

Test Connector:

DIN 41642, Type C

Measurable Features:

Short /open measurement between a defined point and between all other points

Measuring Voltage:

5V (measuring current: <1mA)

ESD protection of all test points

Total time of measurement:

Less than 0,25 s (by 256 Test Points)

Display:

- LED Display (good/not good) for all test points in order to show datas in details
- Graphical LCD for detailed mistakes showing and results

Power Supply:

External DC adapter (part of the system)

Interface for PC:

USB (for optional PC Software)

Environmental Requirements:

Shop-floor:

Temperature: 10°C - 40°C

Humidity: 10 % - 80 %

Storing:

Temperature: 0°C - 45°C

Humidity: 5 % - 95 %

Size:

440x135x300mm (W x H x D),

Without handles on the front panel

Language of Tester Menu:

English



Midi Cable Tester - MCT 200/300

This system is ideal for cable harness manufacturers with simple cables! After the „golden“ sample cable has been taught to the system, then all manufactured cables will be compared with this golden sample! According to customers needs any kind of JIG or test module can be manufactured by Equip-Test for this system.

Test Point Count:

256 (MCT200), 512 (MCT300)

Test connector:

DIN41612 (Type C, 2 rows, 64 point) female

Measurable Features:

Continuity, Resistance, Diode between any Test Points

Measuring Voltage/current:

Short/open: 5 V (current less than 10 mA)

Diode Test:

10 mA (voltage less than 5 V)

Resistance:

1 μ A - 10 mA

(depends on measurement range, max. voltage: 5 V)

ESD protection on all Test Points

Test cycle:

Less than 4.5 s (for continuity test)

Display:

- Graphic LCD (color, 3,5") for management and results
- Activity LED (flashes by every test cycle)
- PASS/FAIL LED

Interfaces:

- Front panel USB for PenDrive (save, recall, user rights)
- Hardware Key for operator identification
- Rear-panel USB for printer, bar code scanner (optional), etc.
- Rear-panel LAN connection for connecting data base, remote control, etc. (optional)
- XLS file processing for test data and set-up load and save statistics (total number of cables, number of passes and fails, etc.)

Power Supply:

External DC adapter (included) AC 100-240V, 50/60 Hz, 250 mA

Interface for PC:

USB (for optional PC Software)

Environmental Requirements:

Shop-floor:

Temperature: 10°C - 40°C

Humidity: 10 % - 80 %

Storing:

Temperature: 0°C - 45°C

Humidity: 5 % - 95 %

Size:

440x135x300mm (W x H x D),

Without handles on the front panel

Language of Tester Menu:

English and other languages on request



Connector Tester CT 100-1

This Tester was developed to test the assembled Connector. It is able to detect the shorts between the contacts of the Connector and can also detect the missing contact terminals of the DUT.

This Tester is the perfect solution for operators working on the production lines - at the main connector manufacturers. A failure by the operator is eliminated when testing with systems from Equip-Test.

Operation of the Tester:

After the Test Unit is connected with the Test Fixture via a 64-pole flat-cable, the test can start. The blue lamp indicates that the Unit is on stand-by mode. To test the Connector the Test Fixture must be opened and the Connector is placed onto the nest of Test Probes. A mechanical coding system prevents the Connector being placed the wrong way around when the top cover is pressed down. The Test starts automatically. If the test result is „GOOD“ then the operator can open the cover and take out the DUT. If the test result is „BAD“, then the red lamp lights up and acoustic alarm beeps. The DUT cannot be removed from the control box fixture until an authorized person has activated it by means of key.

Our Systems have 2 main parts:

1. Control Box Fixture - customized for Connector
2. Test Unit - programmed always for the specific application (provided by the customer).

Indicating Lamps:

- Blue Lamp: Indicates when the Box is switched ON
- Red Lamp: Indicates when the tested Connector is BAD (i.e. DEFECT)
- Green Lamp: Indicates when the tested Connector is tested GOOD (i.e. PASSED)

Speaker:

Acoustic Alarm

2 Positioned Switches:

Warns for BAD Connector Main Switch



Test Unit

Switch with KEY:

When the tested Connector is BAD (i.e. defect), the Unit can only be started again by switching it on with the KEY

Testing Cycle:

6 seconds

The specification of the Connector Tester:

- Test Point Count: 2 x 2 TP's up to 2 x 92 TP's
- Test Socket: Test access via Test Probes
- Measurable parameters: Short-circuit Test between a particular Pin and all the other Pins.
- Test voltage: 24 V (current <1 mA)
- Total measurement time: Test time less than 14 s (at 184 test pin)
- Display:
 - LED status signal (pass/fail)
 - Buzzer by the wrong part
- Marker: the good part is marked on the Connector
- Power supply: AC 100-240V, 50/60 Hz, 250mA

Operating Conditions:

Temperature: 10°C - 40°C

Humidity: 10% - 80%, no condensation

Storage Conditions:

Temperature: 0°C - 45°C

Humidity: 5% - 95%, no condensation

Size:

Control box (L x W x H):

380 x 400 x 170 mm

Fixture (L x W x H):

300 x 600 x 300 mm



Control Box Fixture

Connector Tester CT 200-1 with sealing test

This system is ideal for cable harness manufacturers with simple cables! After the „golden“ sample cable has been taught to the system, then all manufactured cables will be compared with this golden sample! According to customers needs any kind of JIG or test module can be manufactured by Equip-Test for this system.

This Tester is developed to test the assembled Connector. It is able to detect the shorts between the contacts of the Connector and can also detect the missing contact terminals of the DUT. This device also has an option to test the sealing of the Connector.

This Tester is the perfect solution for operators working on the production lines - at the main connector manufacturers. A failure by the operator is eliminated when testing with systems from Equip-Test.

Operation of the Tester:

After the Test Unit is connected with the Test Fixture via a 64-pole flat-cable, the test can start. The blue lamp indicates that the Unit is on stand-by mode. To test the Connector the Test Fixture must be opened and the Connector is placed onto the nest of Test Probes. A mechanical coding system prevents the Connector being placed the wrong way around when the top cover is pressed down. The Test starts automatically. If the test result is „GOOD“ then the operator can open the cover and take out the DUT. If the test result is „BAD“, then the red lamp lights up and acoustic alarm beeps. The DUT cannot be removed from the control box fixture until an authorized person has activated it by means of key.

Our Systems have 2 main parts:

1. Control Box Fixture - customized for Connector
2. Test Unit - programmed always for the specific application (provided us by the customer).

Indicating Lamps:

- Blue Lamp: Indicates when the Box is switched ON
- Red Lamp: Indicates when the tested Connector is BAD (i.e. DEFECT)
- Green Lamp: Indicates when the tested Connector is tested GOOD (i.e. PASSED)



Test Unit

Speaker: Acoustic Alarm

2 Positioned Switches:

Warns for BAD Connector Main Switch

Switch with KEY:

When the tested Connector is BAD (i.e. defect), the Unit can only be started again by switching it on with the KEY

Testing Cycle: 6 seconds

The specification of the Connector Tester:

- Test Point Count: 5 TP's up to 32 TP's
- Test Socket: Test access via Test Probes
- Measurable parameters: the presence of items are checked in the Connector
- Test voltage: 24 V (current <1 mA)
- Total measurement time: Test time less than 0,5 s (at 32 test pin)
- Display:
 - LED status signal (pass/fail)
 - Buzzer by the wrong part
- Marker: the good part is marked on the Connector
- Power supply: AC 100-240V, 50/60 Hz, 250mA

Operating Conditions:

Temperature: 10°C - 40°C

Humidity: 10% - 80%, no condensatio

Storage Conditions:

Temperature: 0°C - 45°C

Humidity: 5% - 95%, no condensation

Size:

Control box (L x W x H):

380 x 400 x 170 mm

Fixture (L x W x H):

300 x 600 x 300 mm



Control Box Fixture

Test Modules & Clip Test

Equip-Test focuses on supplying both a mix of high-quality Modules, as well as low cost simple JIGs for testing the Connectors on the Harnesses. On the basis of our experience in this industry our customers can expect to be supplied with high-quality Module Parts, Complete Modules, Test Probe Tools and Accessories!

Depending on the customer demands, we can supply modules made of plastic, glass-reinforced plastic, compressed-wood, aluminium – and other materials on request. The standard module sizes are 100 x 100mm or 50 x 100mm. However, on customer request we can also design and manufacture customized sizes.

Equip-Test also supplies Zero-Force Modules, which are the perfect solution for testing large Cable Harnesses and ensure safe and fast replacement of wires and cables in a mass-production environment.

We provide ergonomic and high-quality Module Solutions for the following main areas in the Cable Harness Testing Industry:

- ...Clip-Test
- ...Push-back Test (zero-force)
- ...Sealing and Continuity Test
- ...Short-Circuit and Push-back Test
- ...Color & Code Identification Test
- ...Presence & Shape Test of Components and Pins
- ...Switch status and condition Test
- ...Module Parts and Release Switch



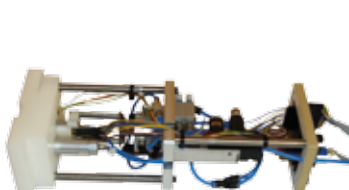
Clip Test



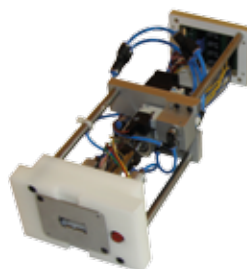
Test Modules integrated into the customized housing with control-panel for MCT 200/300



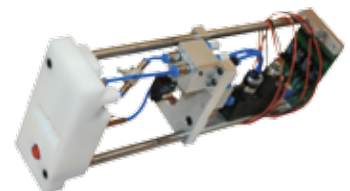
Clip Test



Push-back with pneumatic holder system



Push-back Test



Connector Pin Test

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