NEXEYA
Let's merge our talents

WIDD

What costs must you incur in order to maintain the safety, performance and availability of your equipment in today's competitive markets?
With the increase in electrical controls, what kind of complex strategy and how many tools must you make use of in order to monitor the hundreds of kilometres of cables present in your equipment?

PRESENTATION

With the patented WiDD solution (Wiring Defect Detection), diagnosis and repair of simple breakdowns and more complex failures become quick and easy, getting the equipment back in service and minimising operation loss. Using WiDD, it is possible to cut wiring test, inspection and repair times in half.

Automatic archiving of measurements relative to an original value allows for the lives of cables or electrical harnesses to be monitored and for the detection of latent faults with a view to performing preventive maintenance.

Resulting from NEXEYA's signal processing expertise, the integrated reflectometer is capable of making more than a thousand measurements per second and scanning up to 512 points on a 100m cable harness in less than 1ms. The result of this operation allows for locating faults with up to 1% precision in relation to the tested cable.

Examples of types of faults found:

- Short-circuit detection
- Open circuit
- Grounding
- Connector problem
- Improper equipment connection (if the equipment is connected)
- Insulation problem
- Wire outside of harness or bad repair
- Radius of curvature problem
- Harness movement, etc.

MARKETS

Transport : Air, Sea, Land
Space : Pre-launch satellite harness integrity test, launch platforms
Industries and Energy : Power plants, large industrial facilities, energy transmission
Research : Large scientific equipment

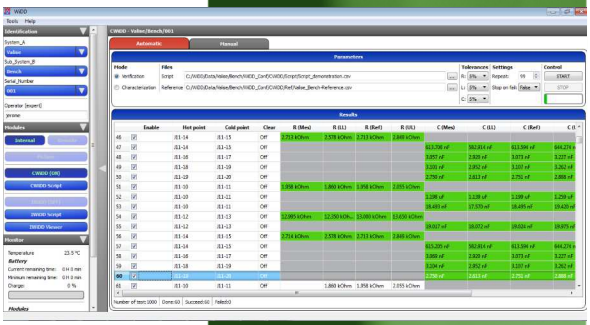
PRODUCTION

Combining the standard LCR measurement and reflectometry, it is possible to detect any defect in the cable or connector appearing upon preparation of the harness or its installation within the equipment. By storing the measurement data, this acts as an ID for the cable and installation for monitoring operations and future maintenance.

WIDD

MAINTENANCE

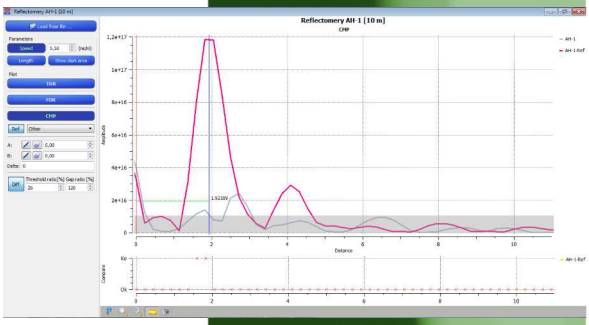
Thanks to the reflectometer, WiDD detects defects invisible to the naked eye or a traditional cable tester by comparing measured parameters with reference values; any deviation is immediately detected and located. Directly connected to the actual equipment or to loads, WiDD can test 512 points in 1ms.
WiDD also allows for harness age analysis and for the detection of any degradation that could cause a fault or major safety issue on the equipment.



REPAIRS

Using the multipoint function of the reflectometer, which can test up to 1024 points, WiDD can:

- Locate defects by testing the harnesses and comparing measurements made with reference measurements.
- Locate and resolve intermittent faults, even small ones such as crimping faults, by sending an electrical wave giving a precise measurement of the defective area.
- Reduce breakdown search times to a few minutes.



AUTOMATIC AND MODULAR

Connected to a PC or tablet using a Wi-Fi connection, the user-friendly GUI is used to configure and run test scripts, display defects and save results for traceability and report publication.

PORTABLE SOLUTION OR CONFIGURABLE RACK

WiDD is provided in:

- rack form, for placement in a measurement array or 19" rack
- an easily transportable wheeled case form

Multiple options:

- Lithium battery (including supervision) certified for air transportation (2.5kg) and controlled via the Internet for fully wireless operation
- Control using a tablet or telephone for single user operation
- Secure Wi-Fi function

SERVICES

- Maintenance
- Training
- Factory or on-site calibration
- Equipment characterisation

NEXEYA
Let's merge our talents

Direction Commerciale
Sales Department
Centrale Parc - Bât.2
Avenue Sully Prudhomme
92298 CHÂTENAY-MALABRY Cedex
France
Tél : 33 (0)5 45 24 87 08
Fax : 33 (0)5 45 60 81 51
sales@nexeya.com