

RTS

REAL TIME SCANNING
harness test system



MK
TEST SYSTEMS
www.mktest.com

INSTANT HARNESS TESTING

without complex interface cables

The Real Time Scanning (RTS) system enables you to check wiring integrity on harnesses during installation.

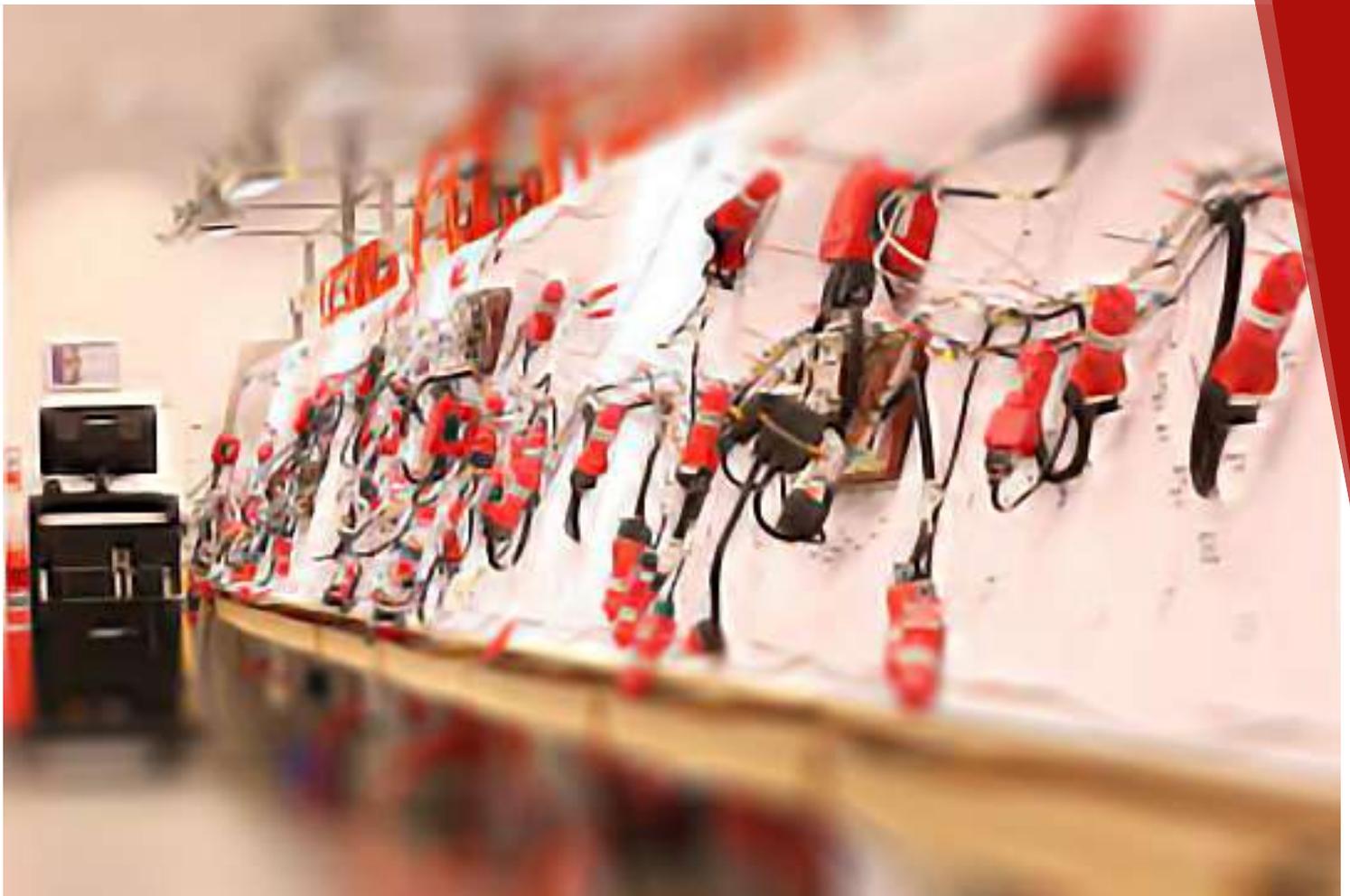
Its diagnostic ability and highly visual format provides instant results, enabling faults such as open circuits, shorts circuits, misswires or inversions to be detected and fixed in real time. And it does it all without long and complex interface cables.

Suitable applications

- High pin count, high connector count assemblies
- Formboard harness tests
- Installed harness test in the vehicle

For test & measurement of

- Open circuits
- Short circuits
- Misswire analysis
- Build progress feedback
- ...all in real time



RTS ENABLES YOU

to achieve these production KPIs

Reduce testing time by 30%

- Hook up time, test time and disconnect time are all reduced.
- High speed switching means the test is complete by the time you finish connecting the test system
- Visual LED indication means harness faults and location are indicated clearly and instantly
- Detailed reports available in real time to aid in rapid test diagnostics and repair

Reduce disturbance to production

- High speed testing and diagnostics = less time testing
- Miniaturized format and reduced interface cabling means other tasks can be carried out at the same time as testing.

Reduce interface cables by up to 90%

- Switching modules are small, lightweight and connect directly to each harness connector
- RTS system fits into the smallest spaces, no need for long interface cables from rack based systems outside of the vehicle
- Adaptors are typically 20cm, compared to traditional interface cables of 5m to 10m
- Miniaturized RTS switching available in Avionic LRU format, 100% elimination of interface cabling
- Results in rapid deployment/hookup, and significant reduction in cable maintenance costs

Reduce footprint & handling effort

- Unique miniaturised switching modules means reduced storage footprint and rapid deployment
- Small lightweight and robust, less chance of damage to the product being tested
- Eliminates health and safety concerns related to moving traditional heavy rack systems

THE RESULT?

A vastly faster, easier & neater test system

from this...



...to this



PRODUCT

Advanced technology

The RTS system uses a low voltage, ultra-fast settling, constant current source and a high speed voltmeter to enable sub-millisecond measurement times.

Combined with the latest technology in high speed solid-state switches RTS can take continuous measurements, scanning over the whole Unit Under Test (UUT) repeatedly and presenting real-time data to the MKAT Gen3 software.

"This unique combination of super high-speed technologies means our customers are reporting more than 30% reduction in overall testing and time!"

Miniature design

RTS switching modules are extremely compact and lightweight allowing easy distribution around the UUT.

A combination of modern electronics, low profile components and a robust plastic enclosure allows an industrial solution with minimal interface wiring between RTS and the UUT.

"A miniaturized test system means reduced footprint, simple storage, reduced handling effort, rapid deployment, and less interruption to other work-packages during the test phase."



FEATURES



Full colour indicators

Each of the switching modules within the RTS system is fitted with a full colour RGB indicator per connector.

This indicator adds to the real-time feedback for operators showing the state of each connection (Pass/Fail/Idle etc.). Using this, the operator can quickly identify fault locations and fix them immediately rather than waiting for a full test to complete.

All colours and brightness are fully configurable using the MKAT Gen3 software with many options for how specific faults are displayed.

"The configurable LED indicators guide the operator to specific fault locations, faster and clearer fault diagnostics and reduced testing time."

MAG connector

The RTS satellite modules are linked to the umbilical by the unique magnetic MAG Connector. Designed in-house by MK Test Systems, the MAG creates a fast and efficient method of hook-up within the RTS system.

Using magnetic polarisation the operator can "feel" the correct orientation of the connector and spring pins create an excellent contact held only by the magnetic force. The MAG creates a quick disconnection point protecting the UUT from accidental damage if the module or interface wiring is pulled on by mistake.

"The MAG connector means simple and rapid hookup, rapid disconnect, and a faster overall test phase."

MKAT SOFTWARE

Our Gen3 software, superboosted for RTS.

RTS has been integrated into the existing MKAT Gen3 software suite, offering users the full range of powerful and intuitive MKAT test, diagnostics and reporting features.

A brand new test type and User Interface (UI) has been added to the MKAT Runner software to display the real time data to the operator. This UI groups and displays all netlist information with easy searching and filtering for passed/failed connections along with specific connections within the UUT.

"MKAT Runner tools provide easy to use, diagnostic features to help the operator identify and locate faults in the shortest time possible."

The MKAT Runner tools have been completely overhauled to take advantage of the new RTS technology.

Using the MKAT RTS reporting tools, multiple operators are able to simultaneously view reports specific to their section of the product under test in real time, leading to faster and more efficient testing.



MK
TEST SYSTEMS

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INFORMATION ON OUR WEBSITE



Service

We offer three levels of service agreement, providing peace of mind and help on hand when you need it.

Our service team works face to face with our customers onsite and have an in-depth knowledge of our systems.

Our senior engineers provide an even greater knowledge, supporting our customers with testing requirements, test program development and engineering bespoke solutions.

If required, we can remotely access your system to solve problems and diagnose issues, helping you to get up and running quickly.

For more details of the service packages we offer, please contact us to speak to a sales manager.

Training

We design our products to be easy to use, and pride ourselves on our simple and logical interface.

A half day training session is included in your onsite system installation. Most of our customers find this training to be suitable, but additional training can also be arranged.

Additional training options include refresher sessions, MK open days and remote training workshops.

Want to learn more?

For more product information, and the latest blog topics around RTS and high speed testing, we recommend you visit our website.

To discuss how RTS could suit your requirements, get in touch with us. Our experienced sales team can offer advice and guidance on any questions you may have.



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About us

We've been designing and manufacturing automatic electrical test equipment for over 30 years. In that time, we've provided systems to customers around the world, in the following industries:

- Aerospace
- Defence
- Rail
- Industrial, Power & Control
- Subsea
- Automotive

Our range of products enable rapid, automatic testing of engines, wiring harnesses, slip rings and other vital components.

We can work with you wherever testing is undertaken, at any stage of the product lifecycle. This may be at component manufacture stage - providing quality assurance to subcontractors - or at the final assembly stage, ensuring complete confidence in the final product. Beyond this, we also provide testing solutions for MRO and servicing.

Talk to us

Our UK head office is supported by satellite locations in the US and Hong Kong. With our large global network of Partner sales reps and distributors, you can be assured of local support, sales and training.

For your local contact details, please visit our website, www.mktest.com.

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