

# SLIP RING TESTER

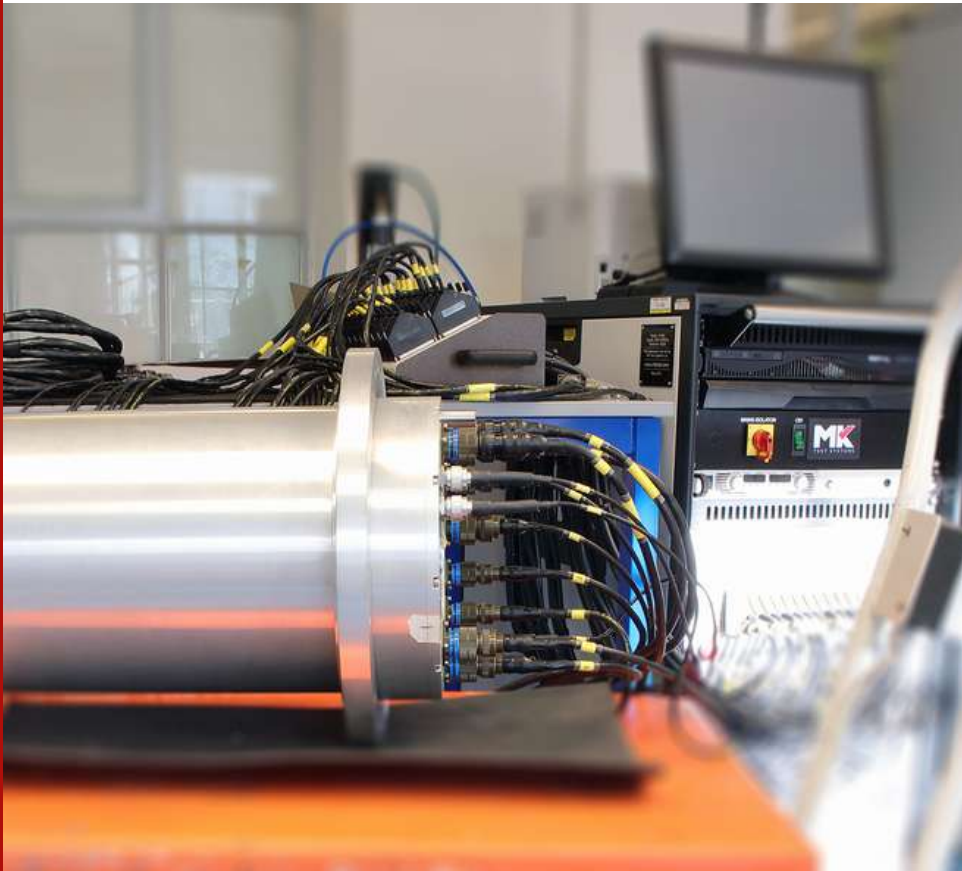
*Automatic slip ring test system*

Purpose designed for manufacturers of specialist slip rings | Communicates with third party environmental test systems



# SRT SLIP RING TESTER

*A low-noise specialist slip ring test system*



The SRT is an automatic test system offering fast and accurate measurement and reporting of:

- Noise
- Contact resistance
- Insulation resistance

It's designed to improve QA for manufacturers of slip rings, commutators, and rotary connectors. It can also be used to test devices coming back for repair and overhaul.

The system can be configured to your exact needs.

## CONTENTS

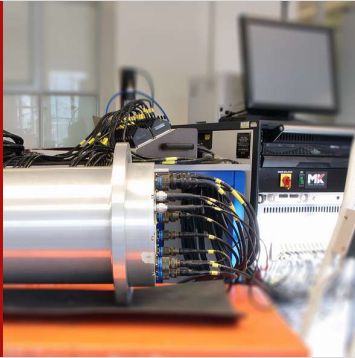
Product applications	2
Customers and case study	3
Specification and benefits	4
MKAT test management software	5
About MK Test Systems	6

*Turn your testing around with MK Test's Slip Ring Tester.*

# PRODUCT APPLICATIONS

## *Slip ring manufacture*

Test and measurement during slip ring manufacture



## *Sub-Assembly*

Test and measurement of slip rings at sub-assembly stage in the manufacture of drones, periscopes, wind turbines, medical instrumentation, and defence applications



# SLIP RING TESTER CUSTOMERS



## CASE STUDY



### *F1500SRT Slip Ring Test System*

Pandect are one the UK's leading slip ring design and manufacturing companies, and have been in the business for over 70 years. Having pioneered many leading slip ring designs, they are amongst the World's best.

Winning a contract for a large quantity of slip rings led to their investment in an MK Test Slip Ring Tester.

Pandect are using the F1500 slip ring tester for specific, larger volume jobs. The benefits of the MK Test SRT system aren't being counted in terms of speed of testing, but rather how the automation improves the administration aspect to quality control.

Special tools enable the capture of scope traces and display this data within the test report. Pass and Fail criteria can be set and filtering of results such as displaying only fails, presents the data in an informative way to the operator. This enables repeatable testing of devices in a controlled manner.

Time consuming manual testing has been replaced with a range of tests such as continuity, and insulation testing of ring against either side, and ring against ring, all against one.

### PADECT SELECT MK TEST FOR 'REPEATABILITY' OF SLIP RING TEST PROGRAM

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#### THE PROBLEM

The slip ring specialist had looked at several different automatic test solutions for many years but their fiddly interfacing was always seen as a problem which negated the speed advantage.

However, winning a contract for a large quantity of slip rings made an automatic system a worthwhile investment, and Pandect selected MK Test Systems Automeg F1500 with SRT (Slip Ring Tester) functionality.

Read more about the **SOLUTION** over the page...



<b>CUSTOMER:</b>	Pandect Precision Components Limited
<b>REGION:</b>	EMEA
<b>SOLUTION:</b>	F1500SRT Slip Ring Tester
<b>APPLICATION:</b>	Slip ring manufacturing
<b>OUTCOME:</b>	Ability to repeat tests; documented results
<b>BENEFITS:</b>	Reliability of testing; ease of repeated testing

*“The MK tester is very reliable – the repeatability is what makes it valuable.”*

Peter Hicks,  
Pandect Precision Components

This case study is available to download from our website in multiple language formats [here](#).

# SPECIFICATION

Built into our Automeg system to provide unparalleled capabilities, the Slip Ring Test module has the following specification:\*

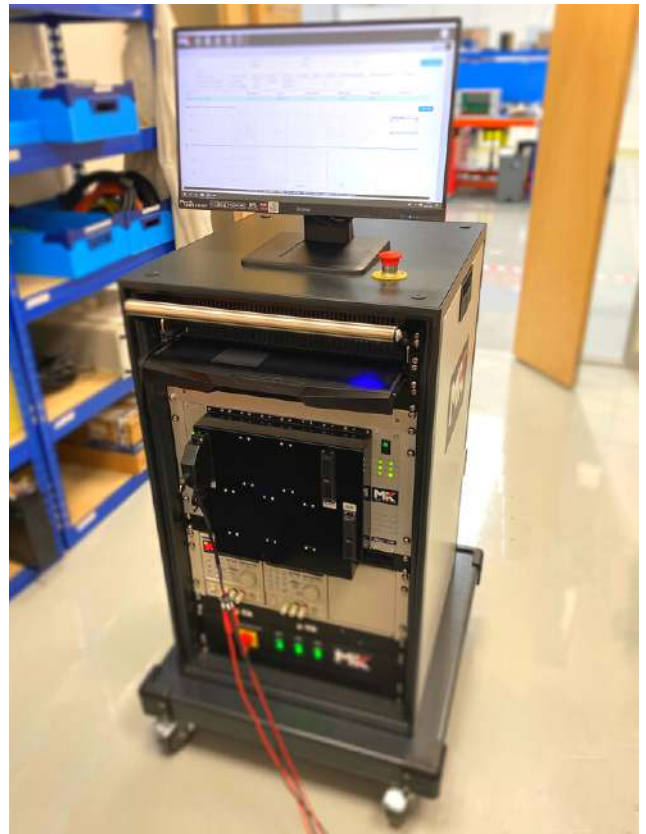
SLIP RING TEST MODULE			
<b>Oscilloscope</b>	Integrated 4 channel 20MHz oscilloscope delivers dynamic resistance trace per ring		
<b>Static Resistance</b>	2m $\Omega$ to 100k $\Omega$	Accuracy 0.5% $\pm$ 2m $\Omega$ @ 1000mA	Resolution 1m $\Omega$
<b>Dynamic Resistance (Noise)</b>	Range: 0.8 $\Omega$ to 1 $\Omega$ @ 2000mA	Accuracy**: $\pm$ 1% (reading)+0.5m $\Omega$ $\leq$ 3kHz	
	Range: 8m $\Omega$ to 20 $\Omega$ @ 100mA	Accuracy**: $\pm$ 1% (reading)+5m $\Omega$ $\leq$ 3kHz	

## BENEFITS

- Automated, repeatable test programs
- Low resistive noise
- Automatic scope trace control
- Customisable reporting including graphics and your logo

## TECHNICAL AND SYSTEM HIGHLIGHTS

- Integrated 4 channel 20MHz oscilloscope delivers dynamic resistance trace per ring
- Dynamic resistance (noise) range from 0.8m $\Omega$  to 20 $\Omega$
- Static resistance from 0.002 $\Omega$  to 100k $\Omega$
- APG (Automatic Program Generation) offers customization options including graphics
- SRT communicates with 3rd party environmental test systems such as climate chambers and vibration beds
- Powered by MKAT test management software, rated 'easy to use' by 87% of our customers



*We recommend that the SRT module is built into the "D" series of Automeg. To learn more, please speak to one of our systems experts or visit the website.*

\*Under the MK Test Systems Continuous Improvement Programme, specifications are subject to change.

\*\*Subject to interface design.

# MKAT TEST MANAGEMENT SOFTWARE

*"From creation of test programs through to fault diagnostics, MKAT supports your business needs whilst giving engineers control over testing."*

*In our 2022 survey, 87% of our customers said MKAT software was easy to use.*

*"When combined with our Multibus test module, the Active APG tool provides world leading function test capability."*

All MK Test systems run on MKAT, our test management software combining our renowned ease of use with highly advanced technology. It's all driven by our goal of simplifying the test process for our customers.

## SIMPLIFYING THE TESTING PROCESS AT EVERY STAGE

Whilst we pride ourselves on the robustness and reliability of our hardware, it is our software which makes our systems stand out from our competitors.

We've spent years developing and refining our software to make it simple to use yet powerful.

## CREATING THE TEST PROGRAM

Create a test program without having to learn a programming language. We use standard wiring input of Netlist, connection tables and interface adaptor tables to create test programs.

Test parameters such as current, voltage, resistance and dwell can be set by test, group or connection. Tests are enabled or disabled by simple click of a button.

## APG

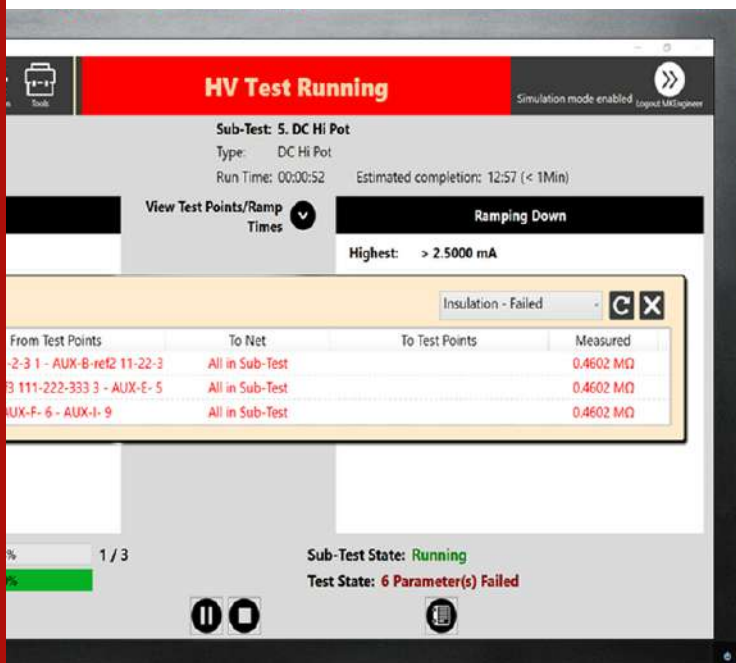
Automatic Program Generation (APG) is included in the MKAT test management software as standard.

Our APG toolset allows the user to re-map fields and use their existing data formats.

## EASE OF USE

Creation of the test program is only the start – our software makes the test process simple.

Operator instructions and prompts can be easily added to any program, and automatic test reports and fault diagnosis tools inform the operator of the nature of the failure and how to fix or retest the fault.



## ABOUT US

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



- Aerospace
- Automotive
- Defence (US DoD CAGE code 8EGR1)
- Industrial, Power & Control
- Subsea
- Trains

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 reps and distributors, you can be assured of local support, sales and training.

## FOLLOW US



For your local contact details, please visit our website, [www.mktest.com](http://www.mktest.com).

