



# The **future** of testing

... because it's all about the **data**

## Driven by **performance**

When it comes to testing, data is everything. MDS has been designing and building test facilities for over 30 years and we know that the ultimate purpose of all that steel, concrete, and sweat is the data that the facility provides.

Every day, MDS clients all over the world rely on the precision, accuracy, and usability of our data to make critical decisions about the performance and safety of their products.

## Shaped by the **toughest demands**

Used extensively by world-leading engine manufacturers such as Rolls-Royce, Siemens, MTU, and UEC Saturn, our data acquisition products are built on the cornerstones of safety, performance, and accuracy.

## Innovation **at its best**

nxDAS is a result of over 30 years of continuously building on our experience in a variety of complex and highly demanding testing environments. MDS data acquisition products are an extension of our drive to exceed expectations and solve industry challenges.



## Designed by test cell operators **for** test cell operators

We aren't just test cell designers, we are also operators. We know the ins and outs of testing like no other and can confidently say that our newest data acquisition product – nxDAS – is the most advanced and capable system on the market for turbo-machinery testing.

nxDAS is a network-based data acquisition system for product validation testing that is hardware-agnostic, efficient, highly automated, and reliably scalable.

- Improved testing efficiency
- Better data, faster
- Change control functionality
- Broader accessibility
- Deterministic alarm response
- Less manpower required for tests



# Lower costs, unparalleled reliability, better data

## Notable features:

- Linux operating system
- System configured for optimum performance and test cell uptime
- Recording of time-averaged test data (steady-state points)
- Acquisition of time-stamped transient data
- Logging of all system events
- Multi-level, robust security

## Lower testing costs, higher efficiency, increased safety

### AUTOMATION

nxDAS helps ensure repeatability and consistency of testing while reducing the number of man hours required to operate the system.

- Remote monitoring and control capabilities, automated safety triggers
- Integrated test procedures allowing fully automated testing
- Auto-throttle capability and full integration with the test article/facility programmable logic controller (PLC)
- Real-time alarm checking with programmable responses to alarm violations (5ms)
- Generation of test logsheets and automated reports
- User-friendly test configuration import with duplication checking
- Unmanned operation can also be supported

## Unparalleled reliability

### SCALABILITY

The network extensible nxDAS is designed to meet the needs of all customers in any testing environment.

- Easily supports any number of instrument nodes publishing data and allows for additional data subscriber applications to process the measured data
- Acquisition of measured channels ranging from hundreds to thousands of channels
- Can be implemented for R&D facilities and MRO/ Production environments

## Reduced costs, improved usability

### INTEGRATION

We always take our clients' actual environments as the basis for product development. That's why nxDAS ensures no surprises and no unexpected costs – a truly hardware-agnostic system that can be installed in any environment.

- No additional drivers for instruments that meet the standard iDDS\* communications protocol
- A wide range of legacy, non-iDDS measurement instruments are also supported
- Combining nxDAS with a Dynamic Data Analysis System means a single operator can control all aspects of data collection
- Integrates seamlessly with a number of DDAS products

\*iDDS is an (i)nstrumentation-centric extension of Object Management Group's Data-Distribution Service. This Standard of the iDDS Working Group governs publish-subscribe of real-time measured data.

## Improved user experience, more actionable data

### VISUALIZATION

nxDAS offers a fully customizable visual interface that helps to communicate and action test data.

- Fully configurable, real-time graphical data display windows
- Highly configurable reports that can be adapted to any standard
- Customized reporting and reviewing tools



**MDS – Head Office Canada**

MDS Aero Support Corporation  
200-1220 Old Innes Road, Ottawa, Ontario, Canada K1B 3V3

Tel.: +1 613-744-7257  
Fax: +1 613-744-8016

**MDS**