

# DATASCAN SERVER



## What is the Datascan Server?

The **Measuresoft Datascan Server** is an OPC Data Access and Excel RTD Server for the Measurement Systems Datascan 7000 range.

The **Measuresoft Datascan Server** comes equipped with desktop configuration and monitoring tools making network setup an straightforward task. Setting up the Datascan network, modules and channels is uncomplicated and user friendly.

Configuration is then used by the server to issue commands to the Datascan via a RS232 cable. During scanning operations, the **Measuresoft Datascan Server** manages all aspects of Datascan communications; initializing & programming the Datascans, commanding them to take measurements, receiving the incoming channel data and constantly monitoring the system for errors.

## OPC Server for Modular Data Acquisition

### Features

Compatible with both legacy (XP) and current versions of Windows

Available in 32-bit or 64-bit versions

Compatible with the OPC Data Access v1.0 and v2.0 standards

Compatible with the Excel RTD standard

Supports multiple Datascan Networks on a single PC using multiple RS232 Interfaces

Interrogation of Datascan network for module and reading of configuration from Datascan

Slow and fast acquisition speeds

Server can act as controller or listener, allowing other systems to be on the Datascan network

Continuous or single shot measurement to avoid wearing down of reed relays

Temperature result setting

Conversion laws

Diagnostic channels and debug output for monitoring Datascan communications

Full traceability of all configuration changes to Datascan

Dynamic calibration and reconfiguration of Datascan channels e.g. modes tags etc., without having to stop OPC clients

Support for all Datascan module types and all associated measurement modes

**7020** – 16 Channel analog input module

**7021** – 8 Channel analog input module

**7027** – 16 Channel isolated analog input module

**7031** – 16 Channel isolated digital input module

**7035** – 16 Channel isolated digital output module

**7036** – 8in/8out isolated digital I/O module

**7041** – 16 Channel isolated digital counter/ timer/ frequency module

**7050** – 8/8 Channel analog input / output module

**7220** – 16 Channel measurement processor

**7221** – 8 Channel measurement processor

**7250** – Analog I/O measurement processor

**7320** – 16 Channel measurement processor

**7321** – 8 Channel measurement processor

**7327** – 16 Channel isolated measurement processor

**7236** – 8in/8out isolated digital I/O module

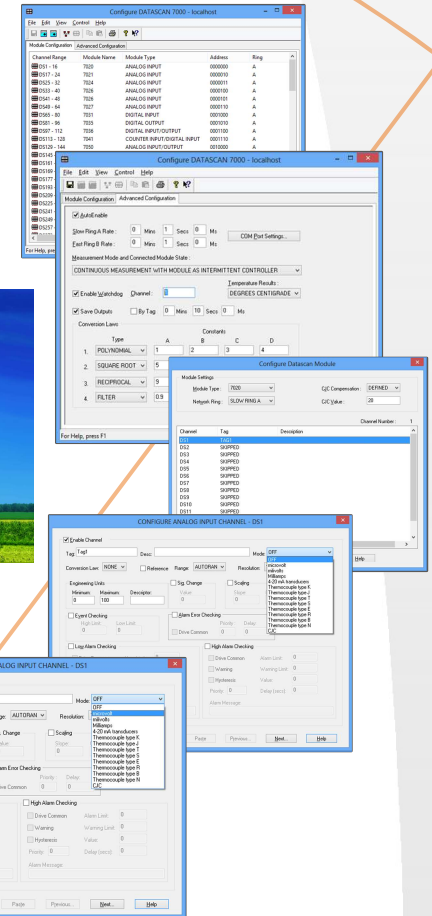


Ambient or external temperature reference

Measurement mode at module or channel level

Thermocouple checking

Datascan watchdog support



## Key Benefits

Connects third party systems to Datascan networks

Allows you to use Excel and as a data monitoring tool

Eliminates the requirement for custom programming or replacement of your software.

Allows you to support Datascan hardware on modern PC platforms into the future without major investment in replacement software or hardware.



Expansion Module Channel Capabilities

Module	7020	7021	7027 <sup>1</sup>	7050	7031	7035	7036	7041 <sup>2</sup>
DC Voltage 4-20mA current Thermocouples	16	8	16 200V isolation	8				
Strain Resistance PRT								
DC Voltage out DC Current out				8				
Digital status Counting <10Hz					16		8	8
Frequency period Counting <3.5kHz								8
Digital status output						16	8	
Specification	General & Analog Spec. A		General & Analog Spec. B	General & Analog Spec. B	Digital Spec. C			
Cost Ratio	0.6	0.6	0.7	0.6	0.3	0.4	0.4	0.7

1 - 7027 can only be used with the 7010 or 7327 processor (up to eight per processor) and cannot be mixed with 702e modules on the same processor. 14-bit conversion is not available on 7027  
2 - 7041 connects directly into the RS485 Datascan bus, not via a processor expansion port

Measurement processor channel capabilities

Processor	7220	7221	7232 <sup>1</sup>	7250	7010	7010-D <sup>2</sup>	7320	7321	7327 <sup>3</sup>
Expansion					Yes	Yes	Yes	Yes	Yes
Pseudo digital <sup>4</sup>									
DC Voltage 4-20mA current Thermocouples	16	8	32	8			16	8	16 200V isolation
Strain Resistance PRT									
DC Voltage out DC Current out				8					
Specification	General & Analog Spec. A				General Spec. only		General & Analog Spec. A		General & Analog Spec. B
Cost Ratio	0.8	0.8	1.3	0.8	0.6	0.4	1.0	1.0	1.2

<sup>4</sup> Pseudo digital inputs are analog inputs configured as digital status inputs.  
<sup>1</sup> - 7232 connects direct to base via RS232; it does not connect to the RS485 Datascan network.  
<sup>2</sup> - 7010-D can only be used with 7031/35/36 expansion modules, to provide an economical solution when only digital signals are required.  
<sup>3</sup> - 14-bit conversion is not available on 7327.

## 'OPC Server for Modular Data Acquisition System'

