

**μS2G2-200i**


**The Perfect  
Integration Platform  
for Unsurpassed Eddy  
Current Capability**



**Through innovation,  
we surpass standard expectations**

**(SG) NDT**  
AN EKOSCAN COMPANY





**Designed with  
functionality  
and capability  
firmly in mind**



**The microS2G2-200i** represents simplicity and superior technical capability. The  $\mu$ S2G2-200i has been designed specifically with functionality and capability firmly in mind, being supplied with industry-standard connectors for quick and efficient Electromagnetic inspections.

The  $\mu$ S2G2-200i boasts a wide frequency range (20Hz-6MHz), double probe input, double encoder input, two independent real-time alarms, plus much more. The microS2G2-200i makes for a perfect integration platform for applications such as in-line wire and bar inspection, material sorting systems or other applications requiring a simple high-end eddy current electronics platform.

## Key Advantages

- Simple 12-15V mains powered
- RJ-45 Standard Ethernet connection
- Front mount Industrial connectors for easy integration
- Impressive technical specifications





## A I/O Connector

- 18-pin Amphenol connector
- Several I/O configurations
- 2 real-time alarms
- Encoder inputs

## B Ethernet Connector

- RJ-45 industry-standard connector
- Used for connecting the instrument to a PC or tablet PC

## C Probe Connector

Standard 19-pin Amphenol connector is used to connect a variety of conventional electromagnetic probes

## D Power On/Off

- Simple, reliable push button

## E DC Connector

The μS2G2-200i can be operated using either an external mains power 15 VDC power supply/adaptor, or an external 24VDC battery pack could be used if required

Industrial inline inspection system using μS2G2-200i Eddy Current Instrument

- Inspection of long products (e.g. wires) at very high speed upon production
- Inline inspection of rods, bars and tubes of various material at high speed.
- Inspection of up to 2 simultaneous production lines
- Multi-frequency harmonic analysis of materials
- Instrument can be used as a stand alone unit (PC is only required to start the inspection)
- Sealed and fanless instrument for use in industrial settings





# EMMA software





## Software Interface

**The heart of all SG NDT inspection instruments is our own EMMA software**, having been developed through many years of continuous research and development to support the most demanding of electromagnetic inspection applications. EMMA is a powerful and intuitive software designed for use across the entire range of SG NDT electronics and supporting several electromagnetic methods.

- EMMA is your new inspection partner for Eddy Current non-destructive inspections.

### LabVIEW Software Development Kit:

The LabVIEW SDK enables users to quickly and easily interface with any S2G2 device.



### API Documentation:

SG NDT can provide all necessary information required to interface with the device, to program the device and acquire signals through a TCPIP link.



# **Quick and efficient Electromagnetic inspections**





# μS2G2-200i Specifications

## General Specifications

Power Requirements	110V-220VAC, 50-60Hz (Auto voltage sensing)
Operating Voltage	12-15 VDC Power
Environmental	Sealed enclosure, designed for IP65
Size (external dimensions)	20.2cm x 12.2cm x 4.8cm (7.9" x 4.8" x 1.9")
Weight (excl.batteries)	1.5 Kg (3.3lb)
Computer Interface	Gigabit Ethernet-1000 BASE-T
Compliance Standards	CE, RoHS
Operating Temperature	0°C to 50°C (32°F to 122°F)
Inputs/Outputs	<ul style="list-style-type: none"><li>• RJ45 Ethernet</li><li>• 19-pin Amphenol - Extended ECT Connector</li><li>• 18-pin I/O Connector</li><li>• 12-15VDC Power Input</li></ul>
Encoders	2 quadrature encoder inputs
Remote Controls	<ul style="list-style-type: none"><li>• Start/Stop</li><li>• Balance</li><li>• Status</li></ul>
Alarms	2 independent real-time alarms

## Eddy Current

Frequency Range	20Hz to 6MHz
Generators / Probe Drivers	1 fully independent
Drive Voltage	0-10 Vpp (single driver)
Output Current	0.220 A max
Reference Generators	1 driver for Electronic balancing
Probe Inputs	2
Number of frequencies	Up to 5 simultaneous
Data Format	32 bits
Data rate	100,000 data points/s/ input



**Are you interested  
in  $\mu$ S2G2-200i?**

**Our team are ready  
to answer your  
questions.**

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