

# SPECIFICATIONS S2G2-800

## GENERAL

Power requirements (automatic selection)	110/220 Vac, 48 to 63 Hz
Housing	Completely sealed enclosure
Size	33 x 26 x 14 cm 4,75 Kg
Weight	4.75 kgs Without Battery 5.75 Kgs with the Internal battery
Computer interface	Gigabit Ethernet- 1000 BASE-T
Compliance	CE, Rohs
Battery type	Lithium-ion, rechargeable, Dot compliant
Battery autonomy	8 Hours
Operating temperature	0° - 50°C (32 - 122° F)
Inputs/Outputs	<ul style="list-style-type: none"> <li>» RJ45 Ethernet</li> <li>» 41 Pin Probe Connector</li> <li>» 39 Pin Isolated I/O</li> <li>» 24 VDC Input</li> </ul>

## EDDY CURRENT (ECT)

Frequency range	20 Hz to 2 MHz
Driving modes	<ul style="list-style-type: none"> <li>» Multiplexed Mode</li> <li>» Continuous Mode</li> <li>» Super Multiplexed Mode</li> </ul>
Generators / Coils drivers	2 fully independent
Drive voltage	<ul style="list-style-type: none"> <li>» 0-20 Vpp (single driver)</li> <li>» 0-40 Vpp (push pull mode)</li> </ul>
Output current	1 A max
Electronic Reference	2 drivers for Electronic balancing
Probes Inputs	<ul style="list-style-type: none"> <li>» 8</li> <li>» 128 with multiplexer</li> </ul>
Number of frequencies	Up to 5 simultaneous
Number of EC channels	<ul style="list-style-type: none"> <li>» 40 in continuous mode</li> <li>» 128 in multiplexed mode</li> <li>» 640 in super-multiplexed mode</li> </ul>
A/D converters	24 bits
Data Format	32 bits
Alarms	4 independent real-time alarms
Data rate	40,000 data points/s

## REMOTE FIELD EDDY CURRENT (RFEC) & NEAR-FIELD TESTING (NFT)

Frequency range	20 Hz to 25 KHz
Driving modes	<ul style="list-style-type: none"> <li>» Continuous</li> <li>» Multiplexed</li> <li>» Super-Multiplexed</li> </ul>
Probe drivers	2 fully independent
Drive voltage	<ul style="list-style-type: none"> <li>0-20 Vpp (single driver)</li> <li>0-40 Vpp (push pull mode)</li> </ul>
Output Current	1 A max
Probes Inputs	8
Number of frequencies	Up to 5 simultaneous
Number of EC channels	<ul style="list-style-type: none"> <li>» 40 in continuous mode</li> <li>» 128 in multiplexed mode</li> <li>» 640 in super-multiplexed mode</li> </ul>
A/D converters	24 bits
Data Format	32 bits
Data rate	40,000 data points/s

## FLUX LEAKAGE (FLT)

Probe Type	<ul style="list-style-type: none"> <li>» Inductive</li> <li>» Hall effect</li> <li>» Magneto resistance (GMR)</li> </ul>
Probes Inputs	8
Number of EC channels	<ul style="list-style-type: none"> <li>» 40 in continuous mode</li> <li>» 128 in multiplexed mode</li> </ul>
A/D converters	24 bits
Data Format	32 bits
Data rate	40,000 data points/s

## EDDY CURRENT ARRAY (ECA)

Channels	64,128, 256, 512
Frequency range	20 Hz to 2 MHz
Multiplexer	Embedded Mux
Connector	41 Pin Probe Connector
Drive voltage	0-20 Vpp (single driver)

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The logo features a stylized 'S' and 'G' intertwined within a circular graphic, followed by the text 'ndt' in a lowercase, sans-serif font with a trademark symbol. Below this, the model number 'S2G2-800' is displayed in a large, bold, white sans-serif font.



### CONTROLLER:

With an Internal Motor Controller, the Motor Unit rotates to perform an ECT inspection with a MRPC probe.



### PROBE INTERFACE MODULE:

The overlay can be customized by its shape, look, number of connectors in order to be adapted to specific requirements.

### I/O CONNECTOR TO CONNECT:

- » Encoders signals.
- » # 4 real-time Alarms Inputs
- » Several I/o to drive your automatic sequence.



### PROBE CONNECTOR:

A 41 Pin connector available for all Probes for all techniques (Array, RFEC, FLT and NFT). It does not require an expensive connector to plug your Array probes.

### DC CONNECTOR:

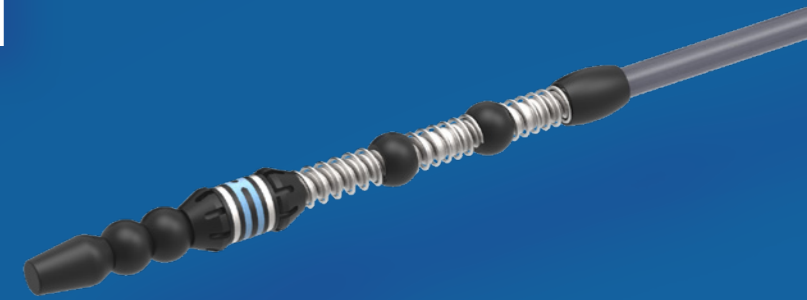
The Unit can run on three modes, with an internal battery, an external battery pack or with an external 24VDC power adapter.

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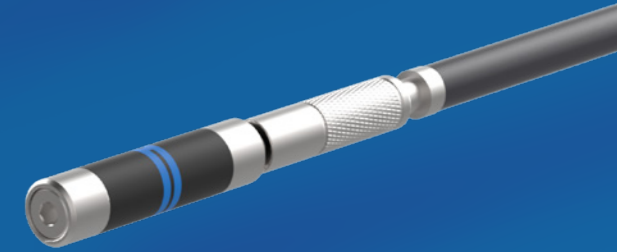
### Bobbin Probe

for SG Tube Inspection



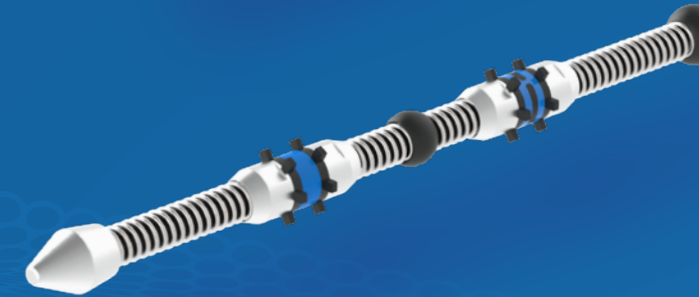
### Eddy Current Technology (ECT) Probe

for heat exchanger Tube Inspection



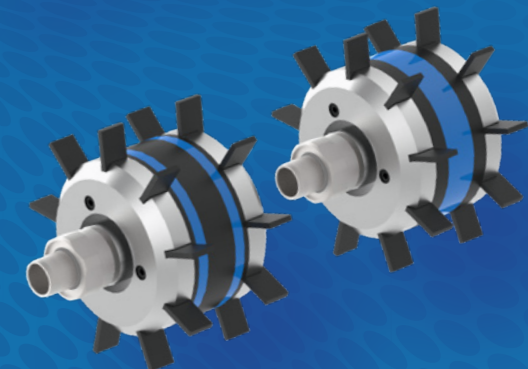
### Remote Field Eddy Current (RFEC) Probe

for Boiler Tube Inspection



### Array RFEC Probe

for Pipe Inspection



### Eddy Current Flexible Array Probe

for Surface Inspection

On this particular ECT Array probe model, if you wear out the sensor components, you can buy the replacement piece without repaying for the whole probe : connector, Multiplexer and cables.

### EMBEDDED MUX:

The Multiplexer has to be close the coils because it reduces the noise level and improves the signal to noise ratio which decreases the Array probe price.

