

# RSWA

R E S I S T A N C E S P O T W E L D A N A L Y Z E R

RSWA is an ultrasonic device designed for quality control and NDE of resistance spot welds. RSWA is a portable and simple-in-operation device capable of producing images of spot weld's internal structures. In addition to live on-screen image, this device performs estimation of the nugget diameter and compares it with predefined minimum nugget requirements.

Using the unique technology of multi-channel ultrasonic matrix transducer, RSWA collects data from the surface and from the internal structures of the nugget. Special algorithms use this data to reconstruct the image of the spot weld and estimate the average diameter of the nugget area in real time.

## Features

- single-frame and continuous data acquisition modes
- automatic and manual nugget size estimation
- automatic detection of scanning depth inside the metal
- two levels of user interface complexity depending on operator skills
- built-in reporting system and file storage

## Application

**Metal stacks:** 2T and 3T; 0.6 – 2.4 mm plate thicknesses

**Types of materials:** mild steel, high strength steel, dual phase ultra high strength steel

**Coatings:** bare, zinc coating (galvanized, galvaneal), e-coating, paint

## Specifications

### Processor

- Intel® Atom N270 1.6GHz

### RAM

- 2 GB DDRII SODIMM

### Hard Disk

- 2.5" 60 GB Solid State SATA

### Display

- 10.2" TFT LCD display with LED backlight, Sunlight readable 500 nit
- Resolution 1024 × 600
- Resistive touch screen
- Replaceable screen protector

### Communications

- Gigabit Ethernet 10/100/1000Mbps
- WLAN 802.11 b/g
- Bluetooth 2.0 EDR Class 1 Module (optional)

### External Ports

- Two USB 2.0, one MiniUSB
- Audio in/out
- RJ45 Ethernet jack
- PCMCIA, CompactFlash slots
- 15 pin D-sub VGA port

### Power

- Two 9-cell smart Li-ion batteries (7800 mAh)
- Average battery run time: 9 – 12 hours
- External power adapter: 100 – 240 V, 50 – 60 Hz, 65 W

### Temperature Range

- 5° – 40° C (41° – 104° F)

### Storage Temperature

- -20° – 60° C (-4° – 140° F)

### Dimensions

- 27×26×11.5 cm  
10.6×10.2×4.5 in

### Weight with Batteries

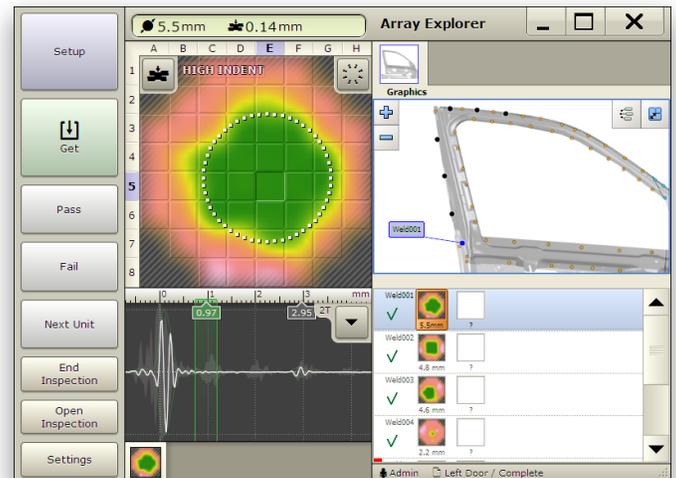
- 4.5 kg (10 lb)

### Transducer

- 52 channels
- Matrix diameter: 10 mm
- Frequency: 15 MHz
- Stainless steel housing
- Rexolite hard delay line

### Cable

- Length: 2 m
- 52 coaxial channels
- Fiberglass protective shell



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