# CrosScan

NDT Systems
Worldwide Excellence in Ultrasonics

## Automatic X-Y Scanner

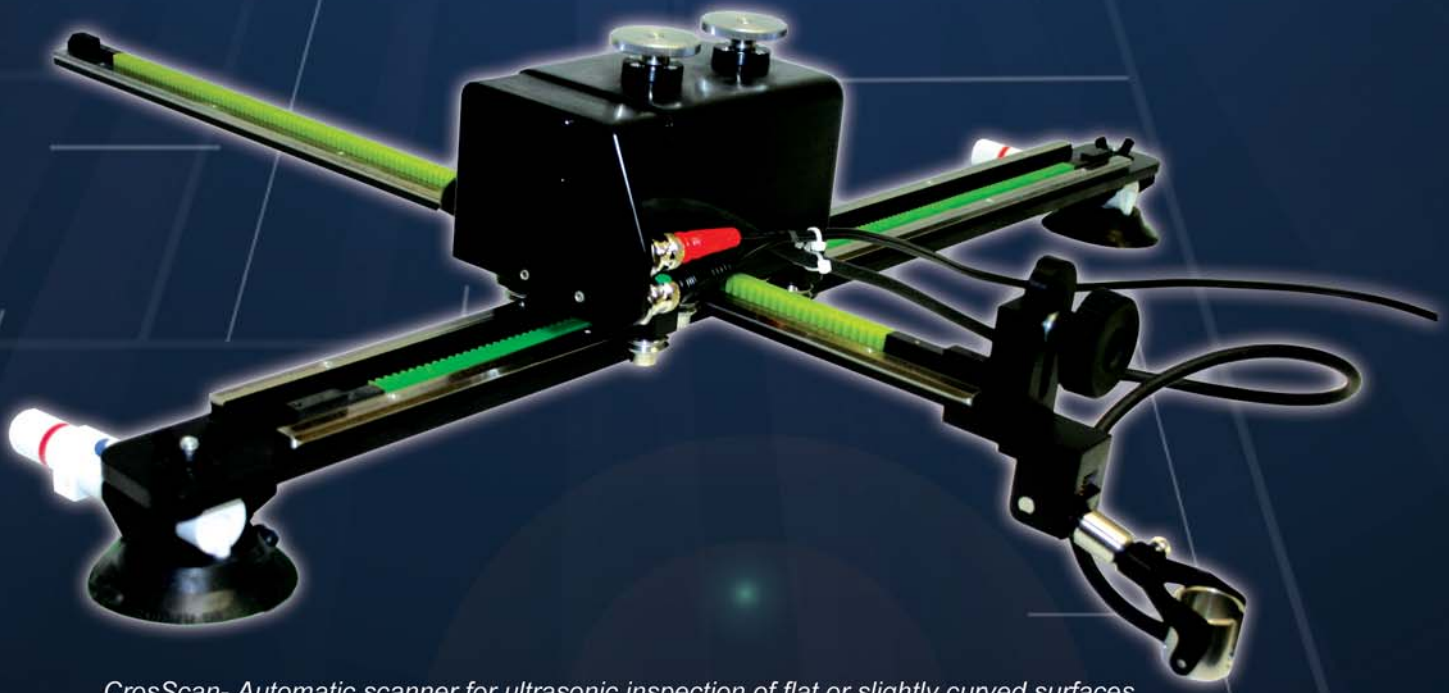
Made in USA

### Applications

- Ultrasonic thickness mapping or flaw detection over a surface (C-scan)
- Low cost, portable, imaging solution
- Inspection of metal or composite aerospace components for defects.
- Production inspection of metal, carbon fiber, glass fiber, laminates and much more…

### Features

- Automatic x-y scanning
- Scan area: 15in.x18in. (0.38mx0.46m)
- Resolution: 0.020in. (0.5mm)
- Magnetic or suction feet
- Liquid feed
- Battery operated or AC powered



*CrosScan- Automatic scanner for ultrasonic inspection of flat or slightly curved surfaces*

### Introduction

Ultrasonic thickness measurements and flaw detection are used across many industries including aerospace, oil and gas and power generation for quality control and in-service monitoring. Conventional systems are based on point to point measurements to inspect for sub-surface defects or measure thickness.

### Full-field C-scan Imaging

By automatically scanning the object surface with a conventional ultrasonic probe, a full-field image of the results can be generated in a plan view format. An image of the result is significantly easier to interpret than point to point data and can be stored as an archive for each inspection. The CrosScan scanner allows for simple area scanning of most materials for a very low price.

### Raptor Imaging Flaw Detector

Powered by the unique Raptor Imaging Flaw Detector, the CrosScan scanner can be used to generate full-field color C-scan images of a test object. The Raptor is a fully functional thickness gauge and flaw detector and, in addition, controls the scanner. It can define the scan area, spatial resolution and speed and displays the resulting images as they are generated. A full suite of software functions is included for further analysis of the results, including B-scan sections, 3D images, statistical tools for defect sizing and much more. The scanner can also be positioned back to any point of interest.

The combined imaging system boasts an unmatched performance for a very low price and is a perfect way to enter the world of imaging and speed up inspection processes.

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## CrosScan Scanner

The scanner is a peripheral to the Raptor instrument. Built with aluminium construction, it is lightweight and can be fixed to the surface using suction cups or magnetic feet depending on the material to be inspected. A spring loaded and height adjustable gimbal mount and different probe holders ensure that the transducer contacts the surface with a constant force, a water feed system provides efficient signal transfer into the test object.

A hardened steel mushroom probe holder is available for rough surfaces, typically found in corrosion inspection. Positional control is done either through the software or mechanical hand wheels on the scanner body.

The scanner comes complete with a 15ft (4.57m) cable and a battery control unit. The scanner and Raptor can be powered by mains power or battery for the ultimate in lightweight and portable imaging systems.


*Raptor Imaging Flaw Detector*


*MCU-1 Battery Control Unit*

*Standard probe holder*

| TECHNICAL SPECIFICATIONS | |
|---|---|
| Package Includes | CrosScan Scanner, 15ft (4.57m) cable, MCU-1 battery control unit with battery, AC-charger, standard probe holder, suction cup feet, Pelican shipping case |
| Physical Dimensions (WxLxD) | 29in. x 29in. x 5in. (734mm x 734mm x 127mm) |
| Physical Weight | 10lb (4.5kg) scanner only |
| Cable Length | 15ft (4.57m) standard |
| Scan Length | X-axis: 18in. (457mm), Y-axis: 15in (381mm) |
| Scan Resolution | 0.020in. (0.5mm) |
| Scan Speed | Max. 6in. /s (150mm/s) |
| Power Source | Battery (10hrs) or AC mains |
| Operating Temperature | 15 °F to 105 °F (-10 °C to 40 °C) |
| OPTIONS | Magnetic feet, Various cable lengths<br>Hardened steel mushroom probe holder<br>Various Transducers-contact, delay line |

*The specifications in this document are subject to change without notice.*

*Version: PI-CrosScan-14v1*

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