

DOLPHICAM2 PRODUCT SPECIFICATION

The dolphicam2 is capable of high-resolution imaging and precise measurements for a wide range of material types including composites, metals and multi materials.

With a straightforward, quick to deploy, user-friendly system, technicians of all experience levels can generate analysis-ready images of materials in real time for quick decision making.





Black Box and Rugged Tablet

The dolphicam2 consists of a rugged 10" Panasonic Toughpad FZ-G1 tablet computer with a combined table stand and Black Box mounting bracket on its rear.

Kick stand allowing you to prop your device at almost any angle that's convenient for you.



Features

- Ergonomic & mobile
- Can connect to external PC
- Audio buzzer
- Bluetooth
- ✓ Wi-Fi
- (Camera

Size and weight

Toughpad, Black Box and TRM 3.01kg

Size (including

neck strap) 300 x 188 x 70mm Size (Black Box) 200 x 130 x 32mm Size (Toughpad) 270 x 188 x 19mm

Technical details

Transducer ports 2x USB C
Other connections Ethernet
Battery 6-8 hours
Ingress protection IP66
PC/Host port USB C



The Toughpad has a daylight-readable display with gloved-multitouch and waterproof digitizer pen.

The Black Box and Toughpad are joined by a sturdy metal frame. The whole system is reinforced to withstand daily site use. Self contained lightweight and portable and comes in a self- contained ruggedized pelicase



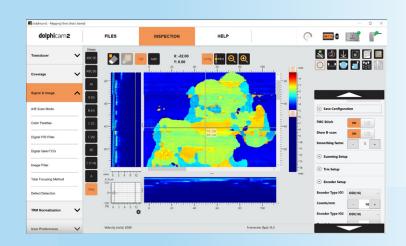
The Black Box itself is the heart of the system, driving the TRM while connecting to the Toughpad which runs and displays the software.

The unit has been tested to withstand drops from 1.3 meters. It has IP66 ingress protection and long battery life (6-8 hours in normal use).

The Toughpad is equipped with an Intel i5 CPU, 8GB of RAM and a 256GB SSD.

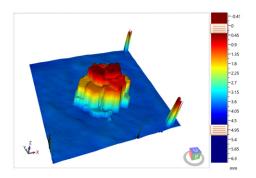
Software

The dolphicam2 software is unique among NDT packages, designed from the ground up to complement the imaging capabilities of the platform (including Live C-scans). Ultrasonic images are shown not just using conventional signal amplitudes, but also as time of flight, opening up a world of instant, color-coded thickness mapping. This is helped further by the live 3D characterization view, which instantly enhance visualization and can be readily interpreted by different levels of end-users.



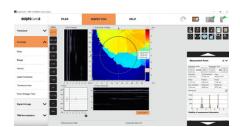
Measurements

- Depth B-scan
- · Line in C-scan
- Depth & Amplitude in C-scan
- Rectangle (Width, Height, Area)
- Circle (Diameter, Circumference Area)



Views

- A-scan
- B-scan (vertical/ horizontal, TFM)
- C-scan (Amplitude, ToF)
- 3D (ToF & Amp)
- Stitch view



Features

- Live 1 Axis & 2 Axis Encoded Mapping
- Grid and free hand stitching
- Configuration setting files
- ✓ Total Focusing Method (TFM)
- TCG Functionality
- Digital Time Corrected Gain (TCG)
- Report configuration
- Defect Detection
- Histogram Statistical Data Graph

Other General Functionality

Color focus

Reset settings to default

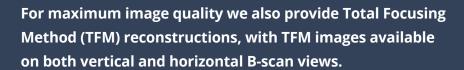
Save screenshot

Remote TRM activation

Expanded view (hide config menu)

Comfortable handle for portability

On board, simple to use calibration function





Specification

Data transfer rate Up to 3.2 Gbit/s depending on transducer settings

Effective data acquisition rate 30 full data sets (128x128 A-scans) per second with typical settings

Data processing Low pass filter, data sampling, Total Focusing Method

Visualization Single element signals (A-scans), vertical cross sections (B-scans),

horizontal cross sections and material thickness mappings (C-scans) and 3D.

Adjustable settings Measurement unit, material depth, gating, material sound velocity, transmit

pulse shape, gain, filtering and averaging, time corrected gain, color palette

Statistical data Mean (+Std. Deviation), Median, and Mode

Data file format Open, HDF5 based file format

Time Corrected Gain (TCG) 0 to 10 dB/µs

Digital Gain +50dB

Averaging 1 - 16

Delay 1 - 82 µs

Depth 1 - 120 mm @ 6,000 m/s

Velocity 100 - 20.000 @ 6,000 (list of velocity)

Gates 3 separate gates

Amplitude threshold Threshold for each gate

Capture method (for C-scan) Max Absolute / Negative / Positive

A/B Scan Mode (RF) Full, Absolute. Envelope

Color palettes (Jet, gray, grav-inv, autumn bone, winter, rainbow, ocean, summers,

spring, hsv, pink, hot, customizable)

Image filter None, gaussian, median

MORE INFORMATION

Want to learn more about what you can do with the dolphicam2

Contact us to arrange a 10-minute demonstration with one of our expert consultants to understand how you can utilize dolphicam2

sales@dolphicam.com



Russell Fraser Sales Pty Ltd

Ph: (02) 9545 4433 rfs@rfsales.com.au www.rfsales.com.au Unit 10 / 1-11 Burns Road Heathcote NSW 2233

