

# 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 & TOUGHPAD

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 ✓

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.





## SIZE AND WEIGHT

Weight	2.65 kg
Size (including integrated neck strap)	300 x 188 x 70 mm
Size (Black Box)	200 x 130 x 32 mm
Size (Toughpad)	270 x 188 x 19 mm

## TECHNICAL DETAILS

Transducer ports	2x USB C
Other connections	Ethernet
Battery	6-8 hours
Ingress protection	IP65
PC/Host port	USB C

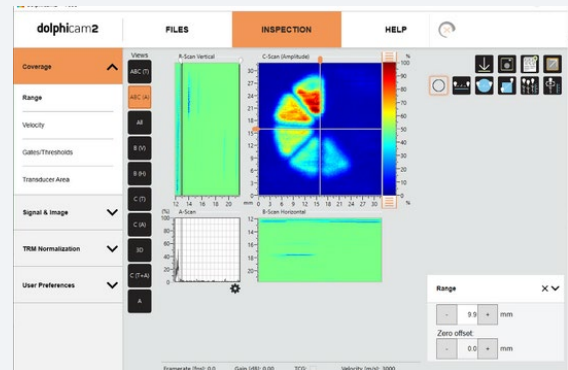
The Black Box itself is the heart of the system, driving the TRM while connecting to the Toughpad which runs and displays the software.

The unit has been tested to withstand drops from 1.3 meters. It has IP65 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.

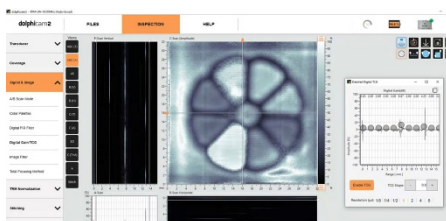
# Software

The dolphicam2 software is unique among NDT packages, designed from the ground up to complement the imaging capabilities of the platform. 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.



## FEATURES

- 1 Axis & 2 Axis Encoded Mapping ✓
- Grid and free hand stitching ✓
- Configuration setting files ✓
- Full Matrix Capture (FMC) ✓
- Total Focusing Method (TFM) ✓
- TCG Functionality ✓
- Digital Time Corrected Gain (TCG) ✓
- Report configuration ✓

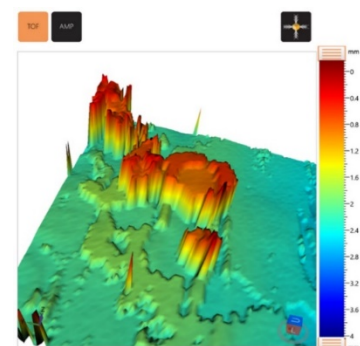


## VIEWS

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

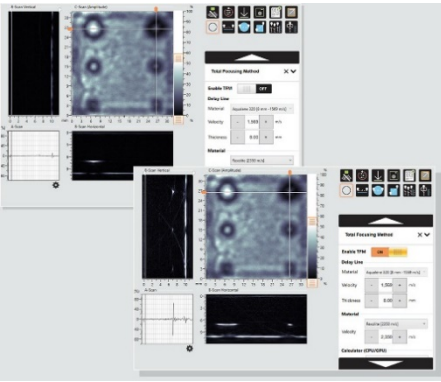
## OTHER GENERAL FUNCTIONALITY

- Color focus
- Reset settings to default
- Save screenshot
- Remote TRM activation
- Expanded view (hide config menu)
- Comfortable handle for portability



## MEASUREMENTS

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



For maximum image quality we also provide Total Focusing Method (TFM) reconstructions, with TFM images available on both vertical and horizontal B-scan views.

**SPECIFICATION**

<b>Data transfer rate</b>	Up to 3.2 Gbit/s depending on transducer settings
<b>Effective data acquisition rate</b>	30 full data sets (128x128 A-scans) per second with typical settings
<b>Data processing</b>	Low pass filter, data sampling, Total Focusing Method
<b>Visualization</b>	Single element signals (A-scans), vertical cross sections (B-scans), horizontal cross sections and material thickness mappings (C-scans) and 3D.
<b>Adjustable settings</b>	Measurement unit, material depth, gating, material sound velocity, transmit pulse shape, gain, filtering and averaging, time corrected gain, color palette
<b>Statistical data</b>	Mean (+Std. Deviation), Median, and Mode
<b>Data file format</b>	Open, HDF5 based file format
<b>Time Corrected Gain (TCG)</b>	0 to 10 dB/μs
<b>Digital Gain</b>	+50dB
<b>Averaging</b>	1 - 16
<b>Delay</b>	1 - 82 μs
<b>Depth</b>	1 - 120 mm @ 6,000 m/s
<b>Velocity</b>	100 - 20.000 @ 6,000 (list of velocity)
<b>Gates</b>	3 separate gates
<b>Amplitude threshold</b>	Threshold for each gate
<b>Capture method (for C-scan)</b>	Max Absolute / Negative / Positive
<b>A/B Scan Mode (RF)</b>	Full, Absolute. Envelope
<b>Color palettes</b>	(Jet, gray, grav-inv, autumn bone, winter, rainbow, ocean, summers, spring, hsv, pink, hot, customizable)
<b>Image filter</b>	None, gaussian, median

# INTECH

# NDE

## Inspection Solutions

**WANT TO LEARN MORE ABOUT WHAT YOU CAN DO WITH  
THE DOLPHICAM2**

**[sales@intechnde.com](mailto:sales@intechnde.com)**

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

**INTECH NDE**

Inspection Solutions

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