## DOLPHICAM2 PLATFORM



The dolphicam2 is capable of highresolution 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

 $\bigcirc$ 

Bluetooth

•

Wi-Fi

Camera

readable display with glovedmultitouch and waterproof digitizer pen.

The Toughpad has a daylight-

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 300 x 188 x 70 mm

integrated neck strap)

**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

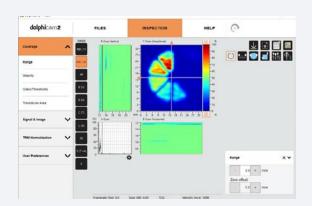
The Black Box itself is the heart of the system, driving the TRM while connecting to the Toughpad which runs and displays the software.

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



OTHER GENERAL FUNCTIONALITY

**Color focus** 

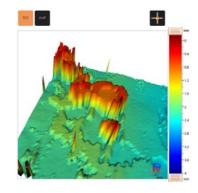
Reset settings to default

Save screenshot

Remote TRM activation

Expanded view (hide config menu)

Comfortable handle for portability



## **VIEWS**

A-scan

B-scan (vertical/horizontal, TFM)

C-scan (Amplitude, ToF)

3D (ToF & Amp)

Stitch view

## **MEASUREMENTS**

Depth B-scan

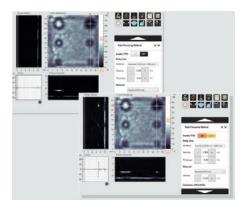
Line in C-scan

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 accessible both during the acquisition itself, and on previously acquired Full Matrix Capture (FMC) data files.

### **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



## 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.

Get in touch



Everest Polska Sp. z o.o.

ul. Geodetów 176, 05-500 Piaseczno k. Warszawy tel. (+48 22) 750 50 83, faks: (+48 22) 750 70 21 email: everestvit@everestvit.pl, www.everestvit.pl

www.everestvit.pl

EVPL-Dolphitec-dolphicam2-(04/2021)

**Dolphitech AS** Studievegen 16 2815 Gjøvik Norway





