



# veo<sup>+</sup>



16:64PR | 16:128PR | MULTISCAN  
32:64PR | 32:128PR | UT - TOFD 2PR

Simplicity | Capability | Reliability



# Smart Portable Phased Array Solution Rethink Your Standard.

## Multiscan Solution

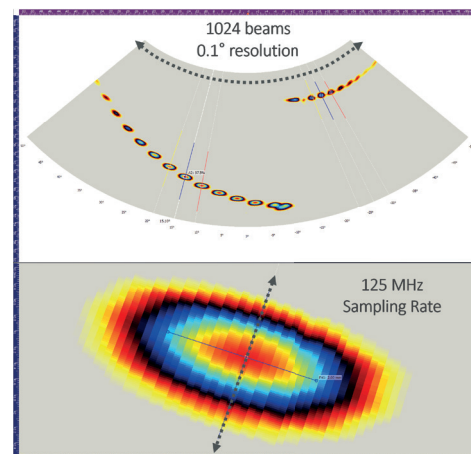
Retaining the best features of the established veo line, the new VEO+ is designed to meet the needs of today and tomorrow, making the VEO+ a smart and future proof asset for your business. Key design elements considered in the development of the VEO+ are user and performance focused. Based on a superior and innovative digital technology, four available PA configurations (**16:64PR**, **32:64PR**, **16:128PR** or **32:128PR**) are offered as software options. Upgradeability in the field when needed!

## Superior Digital Technology

The VEO+ electronic & software is powered by a new architecture offering superior data throughput and unsurpassed computational capacity to deliver fast and accurate results in the most demanding conditions. It allows inspectors to easily create high resolution volumetric scans and record very precise data sets with exceptional measurement precision.

These performances come from an impressive 32 channel PA beamformer providing exceptional SNR, enhanced digital signal processing and the legendary Sonatest ActiveEdge® pulser technology. Thanks to its Linux® 64-bit operating system and its fast 128GB SSD memory capacity, data file size is not a concern for VEO+. Data compression is yet another feature allowing one to record huge amount of information in more manageable data file size.

### HIGH RESOLUTION SCAN



## Connectivity



WiFi



Ethernet



128Gb

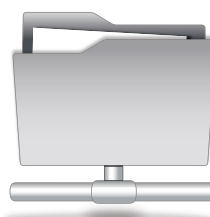


USB



VGA

NETWORK  
FILES TRANSFER



TRAINING &  
PRESENTATION



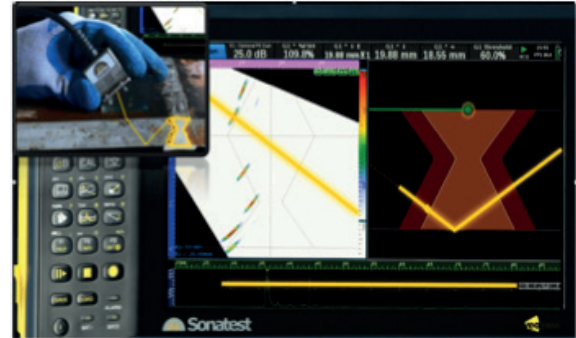
COMPLETE  
REMOTE  
CONTROL



## Onboard Live 3D Scanplan

The VEO+ embedded modeling tools support multiple probes and scans, enabling quick and efficient set up of inspection plans. Choose from a range of weld geometries, render and visualise probes on the part, at precise locations, representing reality with high fidelity. Then add sound paths, with skips, allowing to assess and ensure proper coverage as planned in the scan plan.

The VEO+ embedded modelling tools are invaluable assets and a reference for the inspection report, communicating inspections results more completely and more clearly, as well as providing precious information to increase users' level of expertise. This feature makes the VEO+ a choice of excellence for serious NDT schools looking to provide the best academic training to the future inspectors.



## Remote Control Solution



Using Sonatest's UTLink software application, VEO+ can be fully used and controlled remotely, via a simple network connection. As VEO+ now offers WiFi along with its fast GB Ethernet port, the possibilities are practically unlimited. What about getting real-time advice by an expert sitting anywhere in the world? Absolutely!

- Available for Windows 7, 8 and 10
- Easy installation with quick connection procedure
- Very simple user interface (virtual instrument!)
- Instrument auto-detection (works for veo+ & prisma)

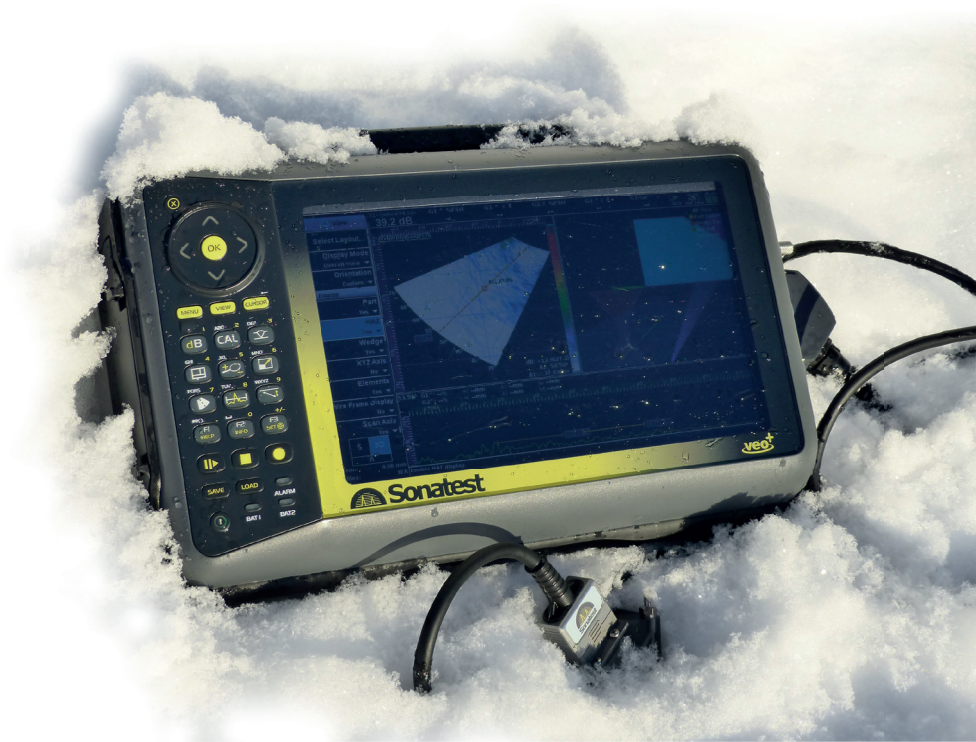
## Advanced Analysis Software



UT Studio software application, which comes as part of the VEO+ package, is used to manage inspection configurations, perform data analysis and build precise reports. VEO+ data files are easily transferred via a network or a USB data key to the PC. Then, thanks to a comprehensive, right click / drag and drop user interface, one can create new data views, customize color palettes, add and modify gates and measurement parameters, generate extended reports and much more. In no time, be able to accomplish amazing things and get the job done.

## Rugged

The VEO+ enclosure has also been designed to withstand the toughest of environments and has been successfully tested in the field for 5 years.







# Power & Precision



Civil & Construction



Mining



Transport

- Complex geometry parts
- Deep penetration
- Attenuative special alloys
- High-Res. weld inspection



## Software Upgrade

- Standard weld inspection
- FAST corrosion mapping
- FAST composite inspection
- Multi-Scan apps



Oil & Gas



Aerospace



Welding



# Performance



# Versatility



Power Generation



Oil & Gas



Service Companies



- Heavy thickness weld inspection (S-Scan & L-Scan)
- 2x 64E probes
- 4x 32E probes
- 6x 16E probes

## 128 Channels Multi-scan



- Standard weld inspection
- Large & fast corrosion map
- Large & fast composite map
- Multi-Scan apps. (128 ch.)



Oil & Gas



Aerospace



Wind Energy

# Productivity





# Specification



## General

Multiscan Quantity  
Pulsers / Receivers  
Gain Range  
Sampling Frequency  
(processing 16 Bits)  
System Bandwidth  
Max Pulse Rate Frequency  
Pulse Voltage  
Focussing Mode

## Phased Array (32:128PR)

Up to 6 scans  
32:128PR  
80dB  
125MHz @ 12 bits  
(processing 16 Bits)  
0.2 to 23 MHz  
50 000 Hz  
100-50V ActiveEdge©  
Constant : Depth, Path  
or Offset

## UT-TOFD(2P)

Up to 2 scans (UT & TOFD)  
2PR (4 connectors)  
100dB  
50/100/200MHz @ 10 bits  
0.2 to 18 MHz  
20 000 Hz  
400-100V ActiveEdge©  
na

S-Scan Resolution

up to 0.1°

na

L-Scan Resolution

1 element or double  
resolution

na

Max PA Beams (focal laws)

Up to 1024 beams

na

Measurement tools

EXTRACTION BOX, 4 gates/  
A-Scan,TCG, DAC, Split-DAC

4 gates/A-Scan, TCG, DGS/  
Split-DGS, DAC/Split-DAC

Max Points per A-Scan

Up to 8192 points per A-Scan (sub-sampling available)

Data Storage & File Size

128 Gb SSD & no file size limit

Operating System

64 bits Linux® OS / Powered by Intel® CPU Core

Analysis Software (PC)

UTStudio® for Windows® 7-8-10 & Linux® OS

Remote Control Software (PC)

UTLink® for Windows® 7-8-10 OS

Onboard Scan Plan Tools

Onboard 3D live rendering

Onboard Reporting Tools

PDF auto-report, Export data to CSV file, Save screen capture

Onboard PDF Reader

Ability to load and read any PDF documents

Integrated Online Help

ACTIVE help genius for parameter optimization procedures, reports

Calibration Standards

ISO18563 (EN16392) & EN12668

## User Interface & Ports

PA & UT Connectors

1 IPEX 128 channels

4 LEMO 1 or 4 BNC

Instrument Display

10.4" wide LED-backlit LCD, enhanced sunlight readable 1024 x 600

Encoder Ports

2 axes : Scan, Index or Clicker (LEMO 1)

GPIO Port (TTL)

Start, Stop, Index, Reset, Alarm (s), Trig... (LEMO 1)

Communication Ports

WiFi 802.11n, Ethernet Gigabits & 3 master USB2

Remote Display Ports

WiFi, Ethernet or VGA

Data Transfer Ports

WiFi, Ethernet or USB

## Operating time, Enclosure & Environmental

Operating Temperature

-10°C to 40°C (14°F to 104°F) storage -20°C to 60°C (-13°F to 140°F)

Operating Time

6.6h (hot swappable batteries)

Power Input

AC 110V/240V @ 50Hz/60Hz

Unit Dimensions

115 x 220 x 335 mm (4.52 x 8.66 x 13.19 in)

Weight

4.54 kg (10 lb) no battery, 460 g (1 lb)/battery)

Environmental Rating

Designed for : IP66, MIL-STD-810G

(Subject to change without notice)

## Standard Package

Veo+ 16:64PR BNC  
Veo+ 16:64PR LEMO  
Veo+ 32:64PR BNC  
Veo+ 32:64PR LEMO  
Veo+ 16:64PR BNC  
Veo+ 16:128PR LEMO  
Veo+ 32:128PR LEMO  
Veo+ 32:128PR BNC

## Software & Options

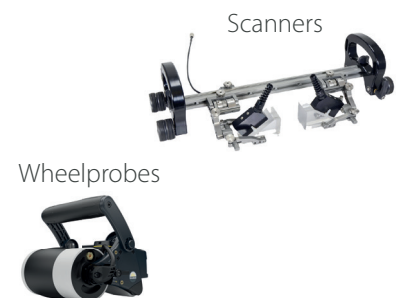
CSV Export  
Upgrade PA 32PR  
Upgrade PA 128CH



## Accessories

32:32 Y-Splitter I-PEX  
64:64 Y-Splitter I-PEX  
Phased Array Probes  
TOFD & UT Probes  
Wedge  
Encoders

\*More Accessories Available



Scanners

Wheelprobes

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