Sonatest

veo+

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

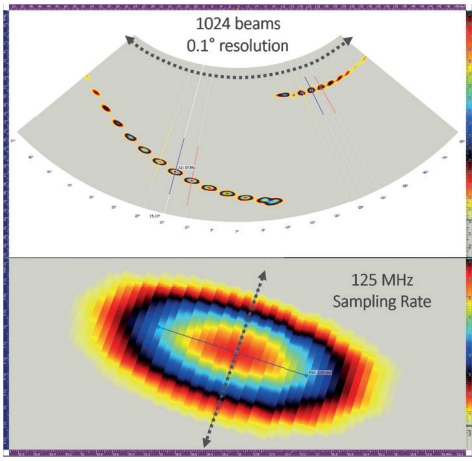
Retaining the best features of the established veo line, the new VEO+ is designed to meet the needs of today and tomorrow, making the VEO+ a smart and future proof asset for your business. Key design elements considered in the development of the VEO+ are user and performance focused. Based on a superior 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

SSD Storage 128Gb

USB

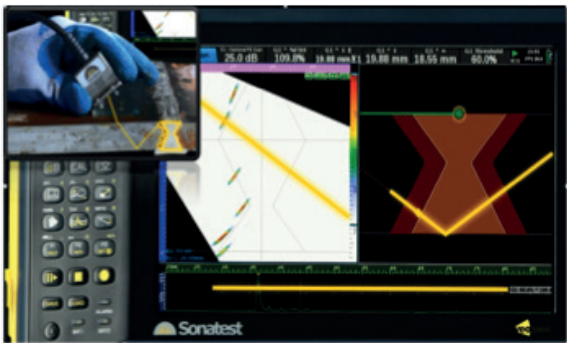
VGA

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

UTLink

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

UTStudio

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

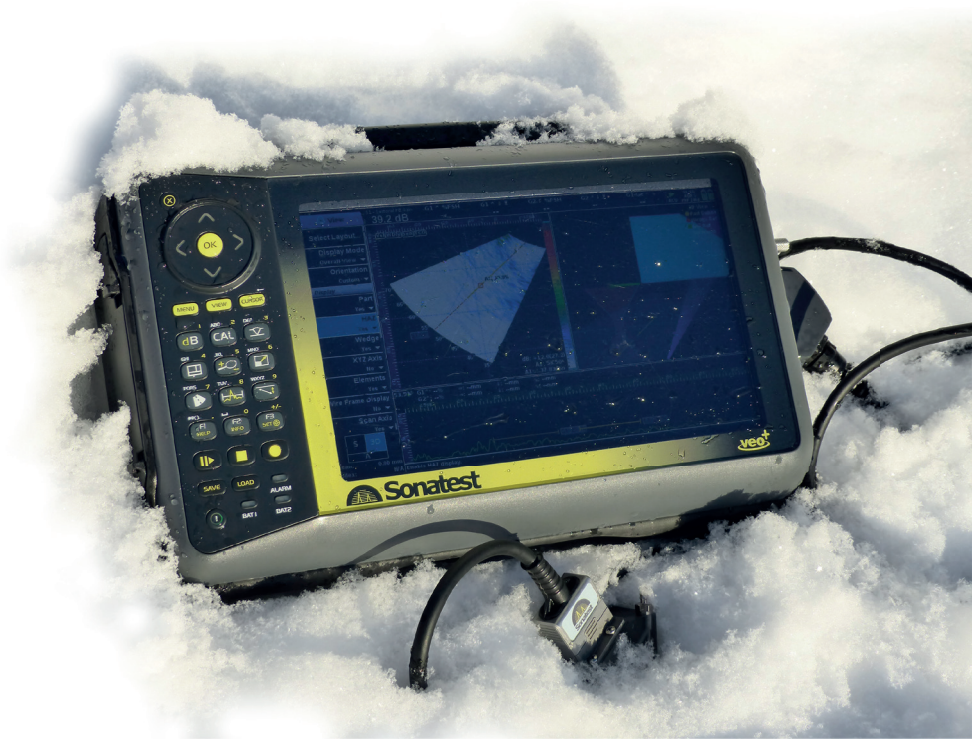
The VEO+ enclosure has also been designed to withstand the toughest of environments and has been successfully tested in the field for 5 years.

WATER RESISTANT

SHOCK PROOF

SUBZERO HERO

DUST TIGHT



Power & Precision

Civil & Construction | Mining | Transport

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

32 Element Focusing

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	Phased Array (32:128PR)	UT-TOFD(2P
Multiscan Quantity	Up to 6 scans	Up to 2 scans (UT & TOFD)
Pulsers / Receivers	32:128PR	2PR (4 connectors)
Gain Range	80dB	100dB
Sampling Frequency (processing 16 Bits)	125MHz @ 12 bits (processing 16 Bits)	50/100/200MHz @ 10 bits
System Bandwidth	0.2 to 23 MHz	0.2 to 18 MHz
Max Pulse Rate Frequency	50 000 Hz	20 000 Hz
Pulse Voltage	100-50V ActiveEdge©	400-100V ActiveEdge©
Focussing Mode	Constant : Depth, Path or Offset	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 swapable 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

(Subjecot 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

UTStudio UTLink

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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