Voluson Signature 20 & 18 help create a more sustainable tomorrow

Our Voluson Signature 20 & 18 women's health ultrasound systems and their services help ensure clinicians and the patients they serve have the technology necessary to create a more sustainable and resilient tomorrow.

Reducing environmental impact

- Voluson Signature 20 & 18 ultrasound systems use 27% less plastic than the previous generation Voluson Signature series.¹
- Voluson Image Portal, a new feature on the Voluson Signature 20 & 18, decreases power consumption by 86% over printing images, and saves \$2,800 per on paper costs.¹

Improving care

- Al features that reduce exam time and increase accuracy and consistency.
- Uniquely intuitive and customizable, the Voluson Signature 20 & 18 have reimagined the user experience to a new level.
- Voluson Unity Architecture: advanced beamforming that works in harmony with expert-level probes to get great images fast.



Contributing to a healthier planet

More than half of the healthcare sector's climate footprint, approximately 53%, is attributable to energy use.² As a result, we have strengthened our commitment to environmentally conscious design and we are implementing more sustainable practices across our product manufacturing, sourcing, distribution, installation, and service operations. This includes improving energy efficiency, optimizing the use of limited or rare materials, providing digitally enabled service throughout the product lifespan, and offering refurbishment and recycling options at the end of product life.

GE HealthCare environmental management system is ISO 14001 certified

Our production and service operations align to ISO 14001 standards

We're committed to environmental product design

This product conforms with IEC60601-1-9: +A1:2013+A2020

² Health care climate footprint report | Health Care Without Harm (noharm-uscanada.org), based on 2019 report

Materials

GE HealthCare reviews the environmental aspects of the material supply used within our products to increase recyclability and decrease the use of hazardous substances, when possible.

Recyclability	We're committed to high recyclability of our products and reuse.	
	Approximately 70.9% of the basic Voluson Signature 20 & 18 ultrasound systems consist of recyclable raw materials:	
	Steel: 21.6 kg / 29.6% Aluminum: 21.5 kg / 29.5% Other: 8.6 kg / 11.8%	
	Packaging material for Voluson Signature 20 & 18 ultrasound systems is recyclable and certified for FSC Chain of Custody by Cheil, a Tier 2 supplier.	
Reduce the use	EU RoHS directive 2011/65/EU	
of hazardous substances	REACH (EC) 1907–2006	

Packaging and distribution

GE HealthCare imaging equipment has a robust and multi-sourced supply chain for systems and spare parts across our product portfolios.

Product packaging	Reusable packaging is utilized for all Voluson consoles.	
	GE HealthCare Ultrasound Korea achieved ISO14021 Type II self declarations. Specifically, packaging material is the recycled content:Minimum 30% applied to all products produced by GEUK	
Product transportation	Air Transport: 99%	

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	Ocean Transport: 1%
	Truck Transport: 0% product transportation utilizes low
	environmental impact modes



Manufacturing

Through our environmental reviews, we also focus on implementing more renewable energy and reducing waste.

Renewable energy	The Voluson Signature 20 & 18 ultrasound systems are manufactured in Seoul, Korea. The facility uses 100% renewable district heating for part of the facility; the rest is a combination of renewable and non-renewable energy.
Reducing electricity	Voluson Signature 20 & 18 ultrasound systems are manufactured in our Seoul, Korea, site.
	Electricity: 81.09 kW Gas: 34.63 mJ (9.62 kW) Wator: 0.38 m3



Product utilization

Our imaging products are designed to help enable energy efficiency through dedicated features and advanced applications to reduce the environmental impact. Ergonomic design can help reduce RSI and strain on the user, and potentially reduce environmental impacts, such as reducing waste and saving energy.

Ergonomically designed

Patient setup	
and positioning	

Operators and clinicians can adjust the Voluson Signature 20 & 18 ultrasound systems for comfort and ease.

Voluson Signature 20 & 18 ultrasound systems' full screen image is 37% larger than the previous generation Signature series.³

Voluson Signature 20 & 18 ultrasound systems are adjustable: Left-right: +/- 30° from center Lift up-down: 800–1050 mm (31.5–41.3 inch)

Ultrasound probes have been ergonomically designed:

- Lightweight, comfortable
- Easy to grip and maneuver
- Can be connected with one hand



Product utilization

Reduce staff burden	Voluson Signature 20 & 18 ultrasound systems:
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- Incorporate features that contribute to an up to 25% time saving during the day.⁴
- Are 18% (17kg) lighter and easier to move versus the previous generation.⁴
- Have a 25% greater range of motion of the control panel versus previous generation to enable an ergonomic scanning position.⁴
- Provide a new, simplified user interface with a 70% reduction in hard keys for easier cleaning.⁴
- Offer voice control capability with Hey Voluson, which can reduce the time needed for assistance by 100% and can eliminate trip hazard by removing the foot-switch cable.⁴
- Reduce boot up time by 33% versus the previous generation or legacy Signature series.⁴
- Have over 180 million ways to customize the touch panel and adapt the system to the user and hospital/clinic workflow.⁴
- Extend battery operation time by 577% versus legacy Signature series.⁴
- Offer more USB options and up to 20 times faster data transfer speed versus previous generation.
- Can simultaneously connect 6 probes when used with VscanAir™ CL.⁴



Product utilization

Reduced noise	Typical acoustic noise: <32.2 dBA
Guidance for product utilization	Instructions are provided for use of the equipment to minimize the environmental impact during installation, use, and operation.
Reduce energy consumption during use	A screen saver can be set to appear after a definable period of inactivity.
	When in Auto Scan Stop, freeze mode is activated after five minutes of inactivity.
	After an hour of inactivity, the system automatically activates freeze mode, even when Auto Scan Stop is not enabled.
	Standby mode uses 98.8% less energy than ready-to-scan mode and more than 99.3% less energy than scan mode.
Power consumption	Off Mode (non-scan): 1.4 W Standby (non-scan): 121 W Scan mode: 190 W

End of product life

We are increasingly putting our retired products' materials back into the supply chain to maximize efficient use and minimize unnecessary waste. This circularity model enables our imaging products to extend their clinical impact through longer lifespans while reducing the environmental footprint. Additionally, we offer our customers support for upgrades and services throughout a product's lifespan, when available, to maintain optimal performance and help drive better patient outcomes.

Our refurbishment programs involve an extensive inspection and testing process, designed to bring equipment back to its original certified manufacturing specifications. If the system is not suitable for refurbishment, eligible parts are harvested for reuse after quality and performance testing, while the remaining parts are returned to dedicated recycling facilities.

Product utilization

Guidance for end of lifecycle	Equipment instructions are provided to minimize the environmental impact for disposal or recycling.
Upgradeable hardware and software options are provided as a solution to extend the product lifespan	Lifecycle plan with performance and feature updates are available for Voluson Signature 20 & 18 ultrasound systems.
Parts harvesting and refurbishment options are provided to reduce waste and	Voluson Signature 20 & 18 ultrasound system parts are eligible for assessment through the refurbishment program, in which they are assessed for refurbishment, harvesting, or recycling at the appropriate time in the lifespan. ⁵
while extending imaging access to less	94–96% of most systems are reused, refurbished, or recycled, extending the lifetime of each product.
advantaged regions	100% of Voluson Signature 20 & 18 parts are harvestable for spare parts.
	100% of Voluson Signature 20 & 18 consoles are eligible for refurbishment.
Waste reduction	This system is in accordance with Waste Electrical and Electronic Equipment (WEEE) regulations.

⁵ Products within ultrasound are eligible for refurbishment, although whether a system is refurbished versus harvested for parts or otherwise recycled or reused is dependent on the state of the system when GE HealthCare takes possession of it. Data on file.

Digitizing healthcare through transformative innovations for a more resilient tomorrow

We are committed to investing in digital capabilities that help accelerate clinical decision making, optimize imaging operations, and drive efficiencies in exam workflows, all of which can improve patient outcomes. Enabling digital transformation will further enhance our predictive and maintenance service operations for the life of your products.

We are also dedicated to driving a more resilient and sustainable future in healthcare. Many factors, including the pandemic, climate-related weather disasters, and supply-chain issues amplified this need. Managing operations through these challenges requires resilience and perseverance.

Helping clinicians advance patient outcomes

Advanced applications and cutting-edge AI tools provide personalized data to drive actionable insights, helping healthcare professionals make fast, accurate clinical decisions for care pathways.

Enhance diagnostic	Volus
confidence	of Al

Voluson Signature 20 & 18 ultrasound systems offer a suite of AI tools which support clinical diagnostic confidence:

- *fetal*HS offers a step-by-step guidance with automated view detection and cardiac axis measurements.⁶
- Fibroid Mapping will successfully segment fibroids in 88% of the cases.⁶
- SonoCNS helps properly align and display recommended views and measurements of the fetal brain.²
- Auto Caliper successfully places measurements in 96.4% of the cases.⁶
- SonoL&D measures and documents fetal head progression during labor.⁶

Keep your imaging equipment up to date with advanced clinical applications Voluson Signature 20 & 18 ultrasound system software updates and upgrades are available.



Optimizing imaging operations

Our women's health dedicated AI and automation solutions are designed to increase efficiencies across the OBGYN ultrasound spectrum without increasing the administrative and training burden on Imaging clinicians and sonographers.

Increase productivity and consistency

- fetalHS offers users a time-saving of 48% with with automated view detection and cardiac axis measurement.⁷
- SonoLyst* is a suite of tools that leverages AI to identify fetal anatomy seen on standard views, then automatically annotates and measures where applicable, and can reduce the time to complete the 28 recommended 2nd trimester exam requirements by up to 40%.⁷
- Fibroid Mapping, an AI reporting tool, maps fibroids in 3D with exact position in relationship to the uterus and will successfully segment fibroids in 88% of the cases.⁷
- SonoPelvicFloor can reduce pelvic floor exam time by up to 87% over manual examinations.⁷
- SonoCNS reduces the analysis time of of the fetal brain by 81.3%.⁷
- SonoAVC[™]*follicle* automatically calculates the number, dimensions, and volume of hypoechoic structures in a volume sweep to help monitor follicles faster.⁷
- Auto Caliper simplifies ovarian follicle measurement and offers an 87% keystroke reduction and an 80% time savings when measuring follicles in 2D versus the traditional manual workflow.⁷



Optimizing imaging operations

Reduce downtime	iCenter™ analytics track metrics and deliver data on equipment status, maintenance history, and performance to help reduce downtime.	
	The remote service platform InSite™ connects you with a GE HealthCare Online Service Engineer or Applications Support Engineer. It has remote diagnostics capability as well as the ability to request service.	
	Software updates are available for download via eDelivery, reducing the need for a service visit to ensure system is secure and up to date with necessary fixes.	
Cybersecurity	GE HealthCare's Design Engineering Privacy and Security (DEPS) process follows GDPR, HIPAA, NIST 800-53, NIST 800-30, ISO 27001, and NIST CSF requirements.	



Enabling intelligent exam workflows

Intelligent automation features help to drive consistency, enable fast, easy exams, and improve workflow with fewer resources.

Reduce setup time	Voluson Signature 20 & 18 ultrasound systems:
	 Offer 180 million ways to customize the touch panel touch panel and adapt to the user and hospital/clinic workflow.⁸
	 Boot up 33% faster versus legacy Voluson Signature series.⁸

Reduce exam time A suite of applications is designed to improve workflow and reduce keystrokes and analysis time, leading to increased efficiency and shorter exams. Imaging tools include:

- Spine Trace can reduce keystrokes by up to 83% over manual imaging and obtain the coronal plane of the spine in ½ the time.⁸
- Flow Profiles offer a 64% keystroke reduction and 56% decrease in Doppler optimization time when compared to manual workflows.⁸
- SonoBiometry helps reduce keystrokes by automatically detecting AC, FL, HL, cisterna magna, lateral ventricle, and cerebellum.⁸
- Uterine Trace enables an 83% keystroke reduction versus standard OmniView approach and allows the user to obtain the coronal plane of the uterus in ½ the time.⁸
- SonoL&D objectively measures and evaluates fetal head progression during the 2nd stage of labor.⁸

Enabling intelligent exam workflows

Ease of use	SonoFHR reduces keystrokes by up to 85.7% through automatic caliper placement. ⁹
	SonoCNS can help reduce keystrokes by 82%. ⁹
	Flow Profiles offer a 64% keystroke reduction. ⁹
	Uterine Trace enables an 83% keystroke reduction versus standard OmniView approach. ⁹
	Auto Caliper simplifies ovarian follicle measurement and offers an 87% keystroke reduction. ⁹
Cleanability	We have reduced hard keys by 70% to aid in cleaning and disinfection. We continue to test and approve new cleaning and disinfecting agents. Visit <i>Cleaning.GEHealthCare.com</i> for updates.