# A new way of thinking

## Philips Sparq ultrasound system overview

Philips Sparq ultrasound system reduces complexity that can create barriers to providing the best care possible for your patients. Created specifically for the clinical, efficiency and space requirements of bedside imaging, it makes scanning, editing and interpreting quality ultrasound images at the point of care simple, so you can work quickly and with ease.
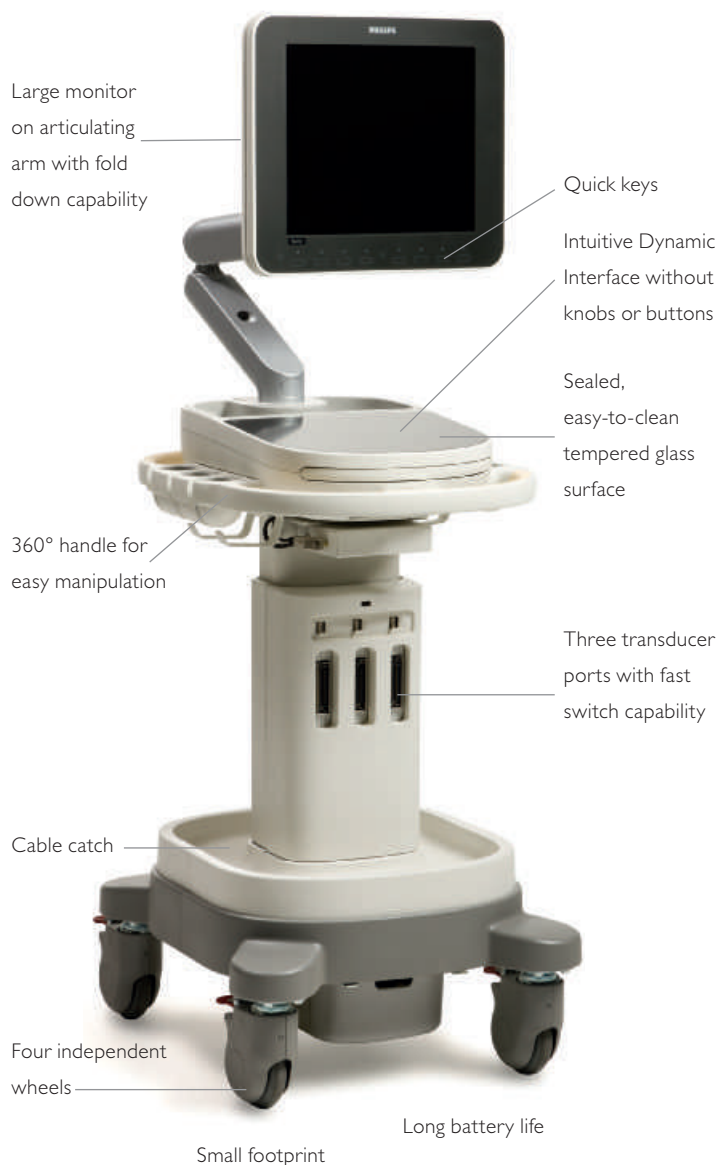
### Key advantages

- Created to make ultrasound imaging easy to learn and easy to use, so you can quickly complete ultrasound exams

- Industry-leading Philips image quality enhances confident decision-making

- A simplified ultrasound system designed for your unique environment

## PHILIPS

### sense and simplicity

# Sparq highlights

From the moment you turn on the Sparq ultrasound system, you'll notice that it is designed to make bedside scanning simple and efficient. You can choose to activate the Simplicity Mode, which presents only the ultrasound functions that you use most often. To make scanning easy, Sparq features an Intuitive Dynamic Interface that eliminates knobs or buttons. When you are ready to begin imaging, the Exam Dashboard walks you through the steps to start the exam.

Large monitor on articulating arm with fold down capability

Quick keys

Intuitive Dynamic Interface without knobs or buttons

Sealed, easy-to-clean tempered glass surface

360° handle for easy manipulation

Three transducer ports with fast switch capability

Cable catch

Four independent wheels

Long battery life

Small footprint

Once you begin scanning, AutoScan automatically identifies tissue type and continuously adjusts the image gain while scanning, decreasing your interaction with the ultrasound system at the bedside reducing distraction from your patient. Real-time M-mode helps achieve accurate cursor placement when imaging dynamic structures. When the exam is complete, it is easy to embed the findings and measurements in reports, and share and archive them via wireless DICOM networking capabilities.

## Easy procedure guidance

Sparq features technology that aids needle guidance. Needle Visualization enhances the presentation of the needle without degrading the surrounding tissue image, to facilitate quick needle guidance to the target anatomy. Philips L12-4 and C6-2 transducers have a centerline mark that corresponds to a centerline on the image, making it easy to conduct out-of-plane procedures. The system also features an on-screen gridline display that provides a visual target and distance estimation, while depth markers provide instant information about image depth, with no need to perform a specific measurement.

## Outstanding imaging made easy

Sparq's proven imaging technologies include SonoCT, which significantly reduces many of the artifacts that are inherent in conventional ultrasound, and XRES, which creates images virtually free from noise, with stunning clarity and border definition. Its transducers help produce outstanding image quality on a variety of patients with a wide range of body habitus. In addition, the large monitor makes it easy to see small details in the image.

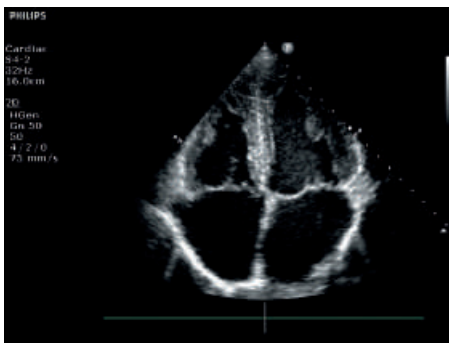Simplicity Mode – ON

Simplicity Mode – OFF

### Designed for your unique environment

Ultrasound imaging has unique challenges – there is limited space to maneuver an ultrasound machine and getting the examination done as quickly as possible is a top priority. Three transducer connectors with fast switch capability allow you to easily change transducers with just a push of a button, and the optional barcode scanner ca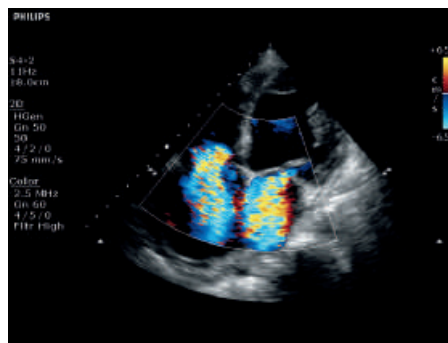n obtain patient information from your hospital-generated barcode, accelerating efficiency and reducing data entry errors. The cable catch keeps cables out of the way, while the small footprint, four independent wheels and 360 degree handle make it easy to maneuver.

Sparq also features a long battery life that provides mobility and access at the bedside. A sealed, easy-to-clean, tempered glass control panel facilitates easy disinfecting between exams.
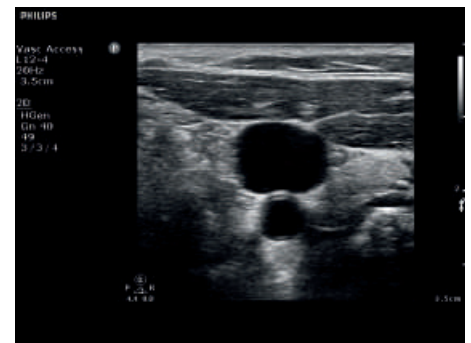
### Industry leading Philips image quality



S4-2 transducer demonstrates extraordinary 2D image quality in this four chamber apical view.



Transthoracic imaging of this valvular insufficiency demonstrates brilliant color fill and Doppler sensitivity.



Superb contrast and detail resolution of the internal jugular vein obtained using the L12-4 transducer.
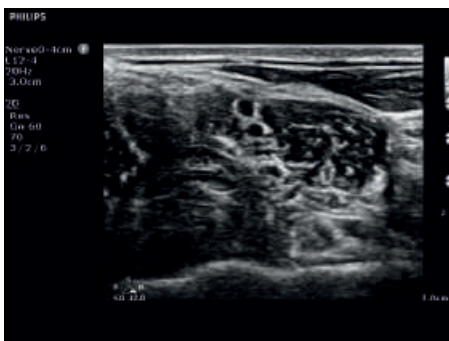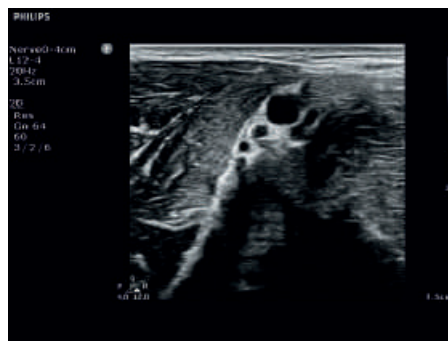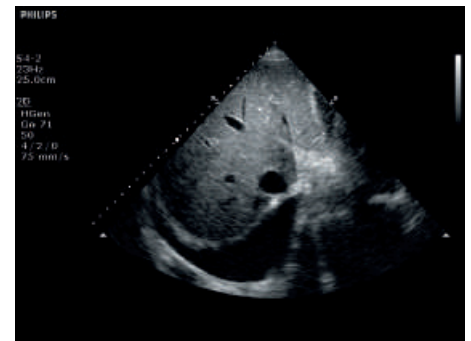


Image of the brachial plexus at the interscalene level showing excellent contrast resolution of fascicles at the root level.



Survey of the axillary area clearly demonstrates the borders and tissue structures of the artery and nerve plexus.



Note the detail and contrast maintained throughout the tissue at a depth of 25cm using the S4-2 in the right upper quadrant of the abdomen.

# System specifications

| Applications | |
|---|---|
| Abdomen | Nerve |
| Cardiac | Lung |
| FAST | Musculoskeletal |
| Pelvic | Musculoskeletal Superficial |
| Vascular access | Spine |
| Vascular arterial | Superficial |
| Vascular venous | Ocular |

| Physical dimensions | |
|---|---|
| Weight | 146 lbs/66.2 kg |
| Width | 21 in/53.3 cm |
| Depth including handle | 25 in/63.5 cm |
| Height | Adjustable from 43.75 in/111 cm to 32.5 in/82.6 cm |

| Power requirements | |
|---|---|
| System | 100-240 V, 50/60 Hz, 250 VA |
| System with peripherals | 100-240 V, 50/60 Hz, 500 VA |

## Imaging modes

- 2D
- Color Doppler
- M-mode (real-time M-mode)
- Anatomical M-mode
- Color M-mode
- Color Power Angio (CPA) imaging
- Directional CPA
- Pulsed wave (PW) Doppler
- HPRF PW Doppler
- Continuous wave (CW) Doppler
- Invert and color invert
- Color compare mode
- Dual mode

- Duplex for simultaneous 2D and Doppler
- Triplex for simultaneous 2D, Doppler, and color or Color Power Angio
- 2D and flow optimization signal processing
- Intelligent Doppler – automatically maintains pre-selected 0/60 degree flow angle
- Live compare
- Tissue harmonic imaging (THI)
- High definition write zoom
- Trapezoidal imaging
- Pulse inversion harmonic imaging
- Adaptive Doppler
- Adaptive color Doppler

- Color tissue Doppler imaging
- Pulsed wave tissue Doppler imaging
- Active native data (allows manipulation of raw image data)
- SmartExam system-guided protocol capability
- Needle Visualization – enhances viewing of the needle to assist the user in guiding the needle to the target anatomy

**Philips SmartPath** assures you easy access to solutions and innovations for the full life of your ultrasound system, so you can boost your clinical and operational potential and achieve your organizational goals.

Optimize your system's performance both now and in the future with regular and ongoing updates, including functionality improvements and remote technical support.

Optimize

Enhance your equipment with regular technology upgrades, and take advantage of the newest features and capabilities.

Enhance

Transform your investment at the end of your system's life by transitioning seamlessly to a next-generation solution or refurbished option.

Transform

Please visit www.philips.com/sparq