

Compact portable ultrasound

Country of origin | United States of America

Health problem addressed

The device addresses the issues of maternal death, maternal near misses, newborn death, and stillbirths. Obstetric complications that may be detected by ultrasound include: placenta previa, fetal malposition, multiple gestations, ectopic pregnancy, retained placental products, fetal anomalies, and fetal demise.



Product description

As a compact portable visualization tool with ultrasound technology this device provides a non-invasive look inside the body for immediate visual validation of what a clinician can feel or hear. The additional information facilitates optimization of the course of treatment for the patient and reduces time required for diagnosis, thereby reducing patient wait times and improving clinical workflow. The device is small and lightweight, which makes it easy to carry and its battery capacity provides over one hour of scanning on a single charge, giving it enough power for a full day's worth of patient exams.

Developer's claims of products benefits

While ultrasound forms an integral part of pregnancy management in developed nations, the technology is highly inaccessible and underused in resource poor settings. The need for trained health professionals, a certain level of infrastructure and a continuous power source limits ultrasound access in many regions. Unlike most available ultrasound devices, this compact ultrasound device is portable, easy to use and is battery operated. The device can also be charged with solar power to enable its use in areas that do not have regular grid power supply.

Suitability for low-resource settings

The technology is suitable for use in health centres in low-resource settings where electricity is irregular or unavailable. It is ideal for attracting more mothers to the formal health system increasing antenatal attendance and institutional delivery. The device has been used in low resource settings by health paraprofessionals in Indonesia, Tanzania, Ghana and Bangladesh. These users were competent performing limited obstetric ultrasound in rural and peri-urban health centers.

Operating steps

To start the device: open the flap and the device will start automatically. Select the OB preset and apply gel on the transducer to start scanning. Increase or decrease depth with the up and down arrows and auto optimize by pressing and holding the central button. Close the device after use and put on the docking station for recharging.

Regulatory status

The device is both FDA approved and CE marked.

Use and maintenance

User: Physician, technician, nurse, midwife

Training: Limited obstetric training is conducted by local trainers usually in the country's capital city.

Maintenance: Limited routine maintenance that can be performed by a nurse, physician, technician, or manufacturer.

Environment of use

Settings: Rural, urban settings, ambulatory, at home, primary (health post, health center), secondary (general hospital), tertiary (specialized hospital)

Requirements: Some source of power, even if intermittent, for charging the device.

Product specifications

Dimensions (mm): 135 x 73 x 28

Weight (kg): 0.39

Consumables: Ultrasound gel, cleaning supplies

Life time: 7 years

Retail Price (USD): 7900 USD with considerable variation between countries

List price (USD): 12,000

Other features: Software use, portable, capital equipment

Year of commercialization: 2010

Currently sold in: More than 40 countries