

Solutions

Estele

Robotics system for Tele-Echography



Applications

Estele is a tele-operated robotic system allowing any expert clinician to perform remotely echographic diagnosis as if he were "on site".

The system is based, on a light 4-axis ultrasound Probe Holder Robot (positioned on the patient by any medical assistant), and remotely controlled by a specialist.

A Bidirectional visio-conferencing system allows :

- > The patient and the specialist to communicate and as if they were in the same room.
- > The specialist to visualize both the images generated by the echograph and see and talk with the patient.

Estele is a reliable turn-key system, easily usable worldwide, and allowing any clinician expert to overcome space and time constraints.

These experts can bring their expertise worldwide, everywhere such competences are missing drastically.

Functionnalities

Estele allows :

- > echography without local expert.
- > hospitals to easily share their specialists.
- > every Hospitals to reinforce their emergency capabilities and availability
- > expert clinicians to double and secure, any difficult diagnosis.

A Remote Master Controller can operate one or several Probe Holder Robots.

Main technical features

Probe Holder Robot is made of :

- > Robotized probe holder:
 - robotized positioning device with 4 degrees of freedom including the contact pressure control.
 - compatible with most brand or size of probes
 - instant probe attachment
 - noiseless and light weight (< 3 kg)
- > Controller:
 - computer rack with visio-conference.
 - software based on robuBOX.
 - storage rack for the computer controlled probe.

Master station (expert clinician side) is made of :

- > Master station with visio-conference
- > A virtual probe

Options

Communication chanel:

- > by RNIS
- > specific communication link (satellite, Network,...)