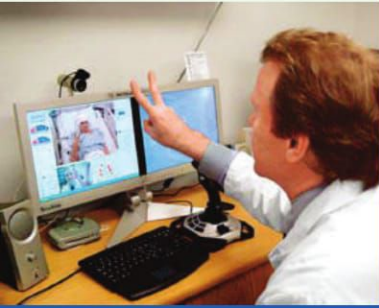


# VCU

« VIRTUAL ICU »

**A mobile ICU interaction system with a Web Controlled robotic cradle**



## Virtual ICU

The face of the ICU is changing rapidly with advances in technology. However, one factor that technology cannot address is the shortage of Critical Care Specialists round the clock. Further, the Government is contemplating to make mandatory for the hospitals to allow relatives of patients to be able to see them in the ICU.

## Challenges :

- Bedside nurses need to have real-time access to senior level intensive care physicians round the clock
- Senior physicians need visual access to patients in ICU/CCU/NCU/ Burns wards and other sterile areas even from remote areas
- Patient's families need to see the patients, but risk of infection is high Thus, the need for a user friendly telemedicine solution that's designed for sterile areas.

The strategic use of information technology (IT) has become one of the important features of modern critical care. IT applications offer the promise of improving patient care, physician efficiency, and patient outcomes

## VCU – A Mobile Digital Visual Interaction System

*suitable for the Indian Hospital and patient environment*

The VCU has been designed specifically for Hospitals to solve these challenges

**Visual communication :** VCU permits real-time, two-way, face-to-face communication between nursing staff, patients and families in the ICU. This interaction provides important visual information that cannot easily be conveyed by telephone, such as, appearance of the skin, appearance of the abdomen, and appearance of the patient's breathing.

**Anytime, anywhere access :** The Physician can virtually be near the patient's bedside from anywhere and even zoom in to take a closer look at the patient or bedside monitors.

**Designed for the ICU :** Lightweight aluminum, hidden cable management trays, height adjustable arms and pan/ tilt cameras make it easy to move within the ICU.

**Integrated patient data :** Further integration enables physicians to view graphical data from a monitor or flow sheet as well as all the interactive functions from even their homes

The VCU could play a significant role in the delivery of intensive care to remote areas suffering from plague, war, or natural disaster, filling the present gap in the delivery of critical care.



## Patient Care Benefits

**For the patient :** Significant reduction in patient mortality rates, reduced length of stay, and better interaction with family

**For the Hospital:** Reduced cost of operation, quicker and more frequent access to intensive care experts resulting in improved outcomes.





## VCU - Visual Interaction System for the ICU

### Features :

- ◆ Elegant Light Weight Design - lightweight aircraft-grade aluminum - easy to handle.
- ◆ Height adjustment by Constant force Spring adjustment system
- ◆ Easy movement castors with locking device
- ◆ Hidden cable management tray.
- ◆ Pan and Tilt Web / Cloud- based motion controlled Display - allow for access anywhere at any time.
- ◆ Wireless mobile unit
- ◆ Built in speaker and microphone with extended handset

### Compatibility:

- Compatible with e ICU software
- Compatible for Standards based interactive Software for interaction with Doctors / patients at homes.

### Future upgradability:

Integrate bedside monitor to enable viewing and monitoring graphical data from a monitor or flow sheet (Only specific brands and models of monitors)

### ORDERING INFO :

VCU – LITE (FIXED HEIGHT – FIXED DISPLAY)

VCU – PREMIUM (HEIGHT ADJUSTABLE – P/T DISPLAY)

### Other solutions for Health Care :

- Telemedicine Centers
- Mobile Telemedicine.
- VOTIS - Operation Theatre Live video interaction system.
- AVTIS - Ambulance video transmission system

Our above solutions are supported by ventures like the portal –

[www.telemedicinetwork.org](http://www.telemedicinetwork.org), a movement to network Tele Medicine service providers and rural clinics and patients across the world with the objective of benefiting the rural masses with better health care

NETS - Network for e Health, Telemedicine & Outreach Services – a NGO providing consultancy services to promote the use of telemedicine & information Technology to bridge the rural – urban healthcare divide in developing economies and implement and run telemedicine programs.

### Technical Specifications :

#### Design

- Light weight aircraft-grade aluminum and ABS plastic
- Mount - Diameter\* Thickness=180\*3 mm
- Handle - on the rear with storage bin for easy handling.
- Castors - 4 x 38 mm dia front Lockable
- Cable duct - 4 channel duct
- Height Adjustment: - Constant force spring adjustment system – Range - 750 ~ 1150 mm (PREMIUM)
- Fixed Height – 1100 mm

#### Pan Tilt Device (PREMIUM only)

- 300° Pan, +/- 45° Tilt
- Inbuilt battery to provide 3 hours of runtime
- Power charging - Mini-USB cable and AC power adapter
- Auto-Pairing of Bluetooth
- Secured holding of display
- RGB power button & Status indicator
- Multi-user control capability

#### Communication Standards

##### Video

- Video: H.264
- Frame rate 30 frames per second
- Video resolution – HD

#### Audio

- Audio G.711, G.728,

#### Network

- ITU-T SIP networks

#### Hardware

- Atom Processor, 2 Gb RAM,
- Wireless – Built in WiFi – WiFi 802.11 a/b/g/n, MiMo GHz and 5 GHz Dual Band
- Bluetooth® 4.0

#### Bedside Monitor Interface:

- Micro USB

#### Display

- Type: LED IPS – HD display
- Size: 10" / 11" / 12" / 13"
- Touch Screen

#### Camera

- Camera Resolution–Full HD
- Horizontal coverage of view 6.4 to 55 degrees

#### Audio

- Hand Set
- Volume adjustment

#### Power Supply

- Inbuilt
- Running time: 180 minutes

#### Registered Office :

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