

## VirtualDoc

### HD Solutions

#### Benefits

- High Definition resolution for a natural, life-like experience
- AES encryption for HIPAA compliancy
- UL 60601 compliant power supply for use in patient care environments
- Cisco 802.11 b/g/n WiFi network with long-range diversity antenna system (Other wireless vendors available)
- Wireless capability supports up to 7 additional IP addresses and wireless roaming capability throughout an entire facility
- Integrated 4 port Ethernet 10/100 Switch for additional networked peripherals
- Battery capable for true mobility; automatic transfer between AC & battery power with no switches
- Power distribution outlets for additional peripherals
- Remote status and control of Power System, Codec, Wireless Network and peripherals via web interface
- Optional medical and nonmedical peripheral devices such as: Otoscope, Dermoscope, Stethoscope, General Exam Scope, Laptop
- Low center of gravity 5-wheel casters provide total mobility and maximum stability (Many health care facilities prohibit 4 wheel carts due to stability issues)
- Integrated ergonomic adjustable handle allows for one hand maneuverability and camera height adjustment to maintain eye contact



Patented



VirtualDoc integrated with optional wired or wireless laptop



Available with dual monitors, expanded work surface and a lockable drawer

**ExStream Mobile Technologies VirtualDoc** provides portable, wireless, high definition video, audio solutions to healthcare, emergency response professionals and patients, anywhere, anytime.

### Integrated with LifeSize HD Solutions

**ExStream Mobile Technologies VirtualDoc** providing high definition Telehealth technology to the patient's location is more important than ever in today's health care facilities. Emergency Departments are mandating mobility, wireless and battery powered visual communications solutions to increase the quality of patient care, reach new markets, provide new services and control costs.

**VirtualDoc** enables medical professionals to provide remote wireless consultations with patients and physicians anywhere, anytime.

All standards based medical peripheral devices are interoperable so the **VirtualDoc** is perfect for delivering continued medical education (CME).

**VirtualDoc** optional integrated medical peripheral devices such as Otoscopes, Dermoscopes or General Exam Scopes to name a few, enable high definition, virtual images to be viewed. Images of a patient's eyes, ears, nose, throat, as well as any other physical attributes can be viewed in real time.

The options are limitless... Let your imagination roam!

**ExStream Mobile Technologies VirtualDoc** was specifically designed for applications where a compact, battery powered, wireless mobile system is required, while still providing the sophisticated technology and flexibility of larger units.

**VirtualDoc** enables you to utilize stethoscopes which provide quality processing of auscultation signals of heart and lung sounds in real time, while giving the healthcare professional the ability to view the patient.

### Wireless Portable Solutions with Unlimited Boundaries

#### Usage Environments

- Hospitals
- Remote Clinics
- University Medical Centers
- Physicians' Offices
- Emergency Rooms
- Outpatient Mental Health Centers
- Skilled Nursing Facilities
- Prisons and Jails
- Intensive Care Units

#### Key Applications

- Emergency / Trauma
- Stroke / Neurology
- Primary Care
- Intensive Care
- Orthopedics / Surgical Follow-ups
- Cardiology
- Pulmonology
- Dermatology
- Psychiatry / Mental Health
- Telementoring
- Sign and Spoken Translation Services

# VirtualDoc

## Integrated with all LifeSize HD Solutions

(LifeSize Express 200 specification depicted. See specific LifeSize datasheet for additional details.)

# ExStream

Mobile Technologies

**ExStream**  
Mobile Technologies

8106 Beckett Center Drive  
West Chester, Ohio 45069  
513.874.8133  
fax 513.874.8233  
www.sales@ExStreammobiletechnologies.com

## Standard Features

### Display

22" LCD (1680 x1050)  
Standard on single and dual monitor mobile systems

### Video Specifications / Video Resolutions \*

Maximum resolutions widescreen 16:9 aspect ratio  
All resolutions progressive scanning  
All resolutions at 30 frames per second \*60 frames per second decode when connected to LifeSize Room 200  
128 Kbps (400 x 244 pixels) Widescreen FCIF  
384 Kbps (768 x 432 pixels) Cable TV  
512 Kbps (848 x 480 pixels) DVD Resolution  
768 Kbps (1088 x 608 pixels) 2x DVD Resolution  
1 Mbps or higher (1280 x 720 pixels) High Definition  
Actual resolution depends upon capability of remote end and is impacted by the quality of the communications channel

### Video Standards

H.261, H.263, H.263+, H.264 and H.239 compliant  
Dual Streaming with video bandwidth balance

### Communications

H.323, SIP  
128Kbps – 2.0Mbps  
1 x RJ-45 Network LAN1 x 3.5 mm Mic In for LifeSize MicPod  
1 x RJ-45 for LifeSize Phone or LifeSize Networker (OPTIONAL)

### Audio Standards

G.711, G.722, G.722.1 (Polycom® Siren14™), G.728, G.729, MPEG-4 -AAC-LC

### High Definition 720p Camera

LifeSize Camera (Pan tilt and zoom)  
4x Optical zoom/4x Digital zoom,  
Auto focus/Automatic gain control  
10 camera presets (near or far end)  
7.5 M/25 ft. cable, optional 15 M/50 ft. cable

### Video Inputs (2 Inputs)

1x High Definition PTZ Camera  
1 x DVI-I In (VGA enabled)

### Video Outputs (2 Outputs)

2 x HD Digital Video Out (720p30)

### Video Format

High Definition, 16:9 aspect ratio

### Other Supported Standards

H.221, H.224, H.225, H.231, H.241, H.242, H.245, H.281, BONDING (ISO13871), RFC 3261, RFC 3264, RFC 2190, RFC 3407

### User Interfaces & Features

Context sensitive user interface  
Graphical User Interface Call Manager  
14 localized languages supported  
Do Not Disturb mode

### Security

Admin and User-level password  
SNMP security alerts  
Ability to disable HTTP, SSH and Telnet services

H.235 encryption support including strict compliance  
IEEE 802.1x support

### Intelligent Networking Features

NAT/Firewall Traversal (H.460/SIP)  
IPv4 and IPv6 support  
Auto H.323 dialing  
ISDN support via LifeSize Networker

### Directory and Address Book

Up to 1000 local directory entries  
Save, Lock, Remove Redial List features  
Missed call notification  
Auto-Discovery directory lookup (patent pending)  
LDAP support/H.350 compliant  
Meetings Directory support

### System Management

Out of box setup via web interface and web management tool  
SNMP  
Backup and Restore capability  
JPEG Snapshots through web interface

### Environmental Data

Operating temperature: 0°C (32°F) to 40°C (104°F)  
Operating humidity: 15% to 85%, non-condensing  
Storage temperature: -20°C (-4°F) to 60°C (140°F)  
Storage humidity: 10% to 90%, non-condensing

### Audio Standards & Protocols

G.711, G.722, G.722.1, G.728, 64 bit & 128 bit MPEG4AAC-LD

### Audio Features

High Definition audio  
GIPS NetEQ packet loss concealment  
Full duplex for natural conversations  
Echo cancellation for echo-free calls  
Automatic gain control/Automatic noise reduction  
Three-way audio add-on call capability  
LifeSize Dual MicPod support (optional)

### High Definition Audio Input

Single omni-directional LifeSize MicPod  
Mute button (Micpod only)  
Powered by codec directly through cable

### Audio Inputs (3 Inputs)

1 x Line In (L+R) (3.5 mm)  
1 x Mic In - Two channel (3.5mm)  
1 x RJ-45 (LifeSize Phone) (Optional)

### Audio Outputs (2 Outputs)

1 x Line Out / Headset (L+R)  
1 x RJ-45 (LifeSize Phone) (Optional)

### Sound System

Integrated 6 watt RMS sound system with high performance speaker

### Computer Provision

Supports optional wired or wireless laptop

### Wireless LAN Provision

Integrated with a field proven Cisco wireless 802.11 b/g/n WiFi network and high performance diversity antenna system. (other wireless vendors available)

### Wireless 3G Provision

Optional high performance 3G wireless router and high performance antenna.

### Maneuverability

Five 4" Twin wheel precision casters for

the ultimate stability. (Two side locking casters)

### Height Adjustability

10" Height Adjustability (work-surface group includes display, camera and work-surface) from floor:  
- Work surface: 32"- 42"  
- Camera: 52.0"- 62.0"

### Cart Construction

Compact work surface  
Light weight aluminum and steel construction  
Easy to clean, powder coated finish  
Easy pneumatic front lift for camera height adjustment  
Large rear handle for easy cart control  
Easy to clean antimicrobial work surface

### Storage

Integrated 16" x 8" x 6" storage basket on rear of cart  
Optional lockable drawer located under work surface

### Dimensions & Weight

Single monitor mobile system  
Diameter: 23.0"  
Overall dimensions  
Depth: 26.5" (including handle)  
Height: 65.5" to top of camera  
Mobile system weight 135 lbs. (single monitor without peripherals)  
**Optional Integrated Peripherals**  
S-Video Switch (4) Position  
Otoscope, Dermoscope, General Exam Camera, Stethoscope, Laptop (additional customer requested devices available)

### Power System

Meets UL60601 leakage current specifications  
Automatic power transfer switch  
Battery Power System  
42 Ah sealed lead acid battery provides up to 4 hours of continuous run time without peripherals  
Central on/off switch with visible battery power gauge and audible alarm

Automatic battery disconnect (Extends battery life)

### Regulatory Model Number

LifeSize Express 200 = LFZ-017

Information contained in this document is preliminary and subject to change without notice.

Patented

For additional information:  
[www.exstreammobiletechnologies.com](http://www.exstreammobiletechnologies.com)