

Advance variant available



Diagnosis

- Blood pressure
- Temperature
- Pulse Rate
- Spo2
- ECG
- Resp.
- Boroscope
- Microscope
- Ear
- Nose
- Skin
- Throat
- X-Ray Viewer



Mobility

Complete Live OPD unit is designed in the most rugged, water-tight protector transport cases which is mobile, portable and easy to carry. Conduct Live OPD from anywhere to anywhere



Connectivity

It combines the speed of multiple 3g & 4g dongles to give you one single combined pipe of connectivity and works in the deepest rural of India.



LIVE OPD

MEDICAL

Health Care
Doctor
Hospital
Pharmacist
Nurse
Dentist
First Aid
Surgeon
Emergency



Key Features

- ✓ Remote-Diagnosis for Patient monitoring and diagnosis
- ✓ Accessibility to conduct medical camps in remote and rural areas
- ✓ Save Time, Energy & Resources
- ✓ Simple, User Friendly & Portable
- ✓ Compliant to telemedicine standards
- ✓ Live Consultation with 2-way audio-video, vital statistics, data and live video feed
- ✓ Advancement with Connectivity and Power Backup options



LIVE OPD

Key Features



Life Saving Diagnostics



Live OPD is an integrated system which includes vital parameters of the patient such as SPO2, ECG, Blood Pressure, Temperature as well as various cameras which can be used for diagnostics of various organs such as mouth, ear and skin etc.

Using Live OPD you can have all the diagnostic details and 2-way video consultation with the doctor in live mode. So whether it is X-Ray sheet or Skin observation everything comes live to the connected specialist doctor

Live OPD system is mobile in nature, works on low speed internet and allows complete diagnostics and live OPD from anywhere to the main location. This will maximize the reach of healthcare and medical services to the remotest places in India.

Medical consultants without travelling can do OPD and check all vital stats of the patient located in remote camp with Live OPD unit. Live OPD gives you freedom to work right from your OPD Desk. Simply get connected to the unit and start your medical consultation in remote OPD. It saves your travel time and energy which is in turn faster ROI.



Mobility



Connectivity

Integrated WESPEED internet link bonding gives you freedom to operate from remote location using multiple 3G and 4G operator dongles. This useful feature gives you complete mobility to operate Live OPD unit from rural areas where consistent connectivity is a big challenge. It Combines bandwidth of up to 8 connections from multiple vendors / ISP. Automatically connects to network when a dongle is inserted. It also features Zero Configuration, Ready to use solution.

Networks supported

- 4G (LTE)
- 3G (HSPA+, HSPA, HSDPA)
- USB WIFI* (802.11 g)
- LAN (10/100)

Simultaneous Bonding

- Upto 8 WWAN (3G, 4G)
- Upto 1 WIFI
- Upto 1 LAN
- Max 8 simultaneous bonding

Output supported

- WIFI hotspot
- LAN
- Live OPD unit



LIVE OPD

Features & Advantages

Live OPD Internal Features

- Live Tele-consultation
- Live Tele-monitoring
- Live Patient Diagnostic statistics
- User authentication from centralized server
- Instant consultation and prescription
- Works on Broadband/3G/4G internet connection

Built-in Diagnostic devices

- ECG
- NIBP
- Spo2
- Resp
- Temp
- PR
- X-Ray viewer
- Endoscope / Borscope
- Digital Microscope

Customized Solution for remote locations

- System designed keeping in view low resource setting and the constraints associated with developing world
- Real-time measurement of vital parameters
- Indigenously developed

Clinically Validated for Safety & quality

- Live OPD has been validated at some of most prestigious Medical Institutes of India
- Components are compliant with IEC 60601
- Manufactured in ISO 13485 Compliant Unit
- Mechanism to capture feedback for audit and quality

Connecting entire healthcare ecosystem

- Integrates end to end healthcare ecosystem
- Remote Clinics, Central Medical Facility, Diagnostic Centres, Hospitals and Pharmacy can be completely networked on enterprise level deployment
- Support Multiple simultaneous consultations
- Data storage on server & Cloud

User friendly System

- Easy to operate by a Para Medics or even a non medico
- Can operate on internet, intranet, Cellular Data Cards using WESPEED internet link aggregation
- Comprehensive user friendly EMR
- Data Security: Right & privileges based upon user role

System Highlights

- Highly modular and customizable
- Centralized User Authentication
- Live monitoring and check-ups
- Store and Forward option

Portable

- Provides easy mobility for carrying from location to location by health workers.

Quick Connectivity

- Application connects, transacts data sets with the server over any connectivity, even at low bandwidth networks it can combine multiple cellular networks using integrated WESPEED link aggregator.

Simple Operation

- Patient registration, capturing and sending diagnostic data, enable consultation with doctors.

Time & Resource

- Data capturing and operations completed in a few minutes resulting in huge cost saving and resource optimization.

Add on Features

- Various applications for increasing access to health care and health education
- The Solution to collect accurate demographic and health related information, useful for the policy makers to make strategic decisions to implement timely health intervention and programs
- Can cover decision support tools to deliver quality recommendations, for achieving better health outcomes.
- Can provide means of delivering national screening and diagnostic service which can allow targeted health analytics, delivery and communication.

Live OPD Video Codec

- H.264
- Vp8

Live OPD Audio Codec

- G.711
- AAC/MP3



LIVE OPD

LIVE OPD Homing Device

Live OPD Homing Device

Live OPD Homing Device Features

- Proprietary Technology
- Central unit for processing video, voice and data from remote locations
- Multi-threaded and multi-core processing
- Support for multiple integrated medical devices
- Highest image compression algorithm
- Support for AEC audio devices
- Support for multiple cameras
- Plug-n-play biometric device support
- Connectivity to Live OPD secure servers
- Support for WESPEED – internet link aggregator
- Offline mode – with Auto Sync facility
- Industry standard 2U rack-mount design
- Support for extended display
- Sleek, rugged and portable

Built-in Support for Diagnostic devices

- Supports up to 12 medical devices simultaneously.
- Built-in universal port for external video / medical camera
- Built-in support for external diagnosis images through external pen drive

Interface Details

Medical Device Interfaces

- RS232
- USB
- Bluetooth
- RCA

Display interface

- VGA
- HDMI / DVI / DP



Technical Specifications

Dimension (W*H*D):19"*3.5"*16.7"/482*88.8*425 mm

Material Construction: Aluminum two front door+two keylock, Heavy-duty & Rugged Steel 1.2mm,

M/B Size: 9.6" x 9.6" (micro-ATX) / 7" x 7"(mini itx)

Expansion:4 slot low profile

Control & Indicator: 1*Power switch +1* Reset switch, 1 x LED (power) +2 x LED (HDD)

2*2.0 USB

Cooling Fans: 3 x 6025 fan in take

Drive Bay: 3 x 3.5"(Internal) + 1 x 3.5(external)+1 x 5.25"

Power Supply: ATX PS2 power supply (12CM or 8CM fan both OK)

Sliding rail:18" ball bearing sliding rail (option)

Color: Black or blue front door

Option: 3-speed fan controller

Operation Humidity (Non-condensing):Up to 90%

Processing: Intel powered Quad Core processor

Internal RAM: 4GB / 8GB

Internal Storage: Minimum 360 GB, expandable up to 2 TB.



Live OPD Variants

LIVE OPD VARIANTS		Basic		Complete		Advance	Advance w.Server
Feature		B1	B2	V1	V2	V3	V4
Proprietary Technology		✓	✓	✓	✓	✓	✓
Central unit for processing video, voice and data from remote locations		✓	✓	✓	✓	✓	✓
Multi-threaded and multi-core processing		✓	✓	✓	✓	✓	✓
Support for multiple integrated medical devices		✓	✓	✓	✓	✓	✓
Highest image compression algorithm		✓	✓	✓	✓	✓	✓
Support for AEC audio devices		✓	✓	✓	✓	✓	✓
Support for multiple medical devices		✓	✓	✓	✓	✓	✓
Connectivity to Live OPD secure servers		✓	✓	✓	✓	✓	✓
Server-client mode. Data storage and backup on server along with device.		x	✓	✓	✓	✓	✓
Support for external SD Video port for medical diagnostics		x	✓	✓	✓	✓	✓
Support for WESPEED – internet link aggregator		x	x	✓	✓	✓	✓
Support for multiple cameras		x	x	✓	✓	✓	✓
Industry standard 2U rack-mount design option		x	x	✓	✓	✓	✓
Support for extended display		x	x	✓	✓	✓	✓
Sleek, rugged and portable option for Remote Diagnostics		x	x	✓	✓	✓	✓
Plug-n-play biometric device support		x	x	✓	✓	✓	✓
Offline mode – with Auto Sync facility		x	x	x	✓	✓	✓
Higher Storage capacity for offline mode - in-built capacity		128 GB	128 GB	500 GB	1 TB	1 TB	2 TB
No. of simultaneous medical devices connected		4	6	8	10	10	10
Support for external High Definition Video port for medical diagnostics		x	x	x	x	✓	✓
Live audio-video broadcast of medical diagnostic devices		x	x	x	x	✓	✓
Record and forward mode for diagnosis video clips		x	x	x	x	✓	✓
Server option **		Rental	Rental	Rental	Rental	Rental	On-Premise
** Server available on rent at extra cost							
Medical Devices							
Pulse Oximeter for SPO2		compatible	compatible	included	included	included	included
ECG – 12 Lead		compatible	compatible	included	included	included	included
Blood Pressure		compatible	compatible	included	included	included	included
Pulse Rate		compatible	compatible	included	included	included	included
Resp.		compatible	compatible	included	included	included	included
Thermometer.		compatible	compatible	included	included	included	included
Digital Stethoscope		X	compatible	X	included	included	included
Weighing scale		compatible	compatible	included	included	included	included
Glucometer for Blood glucose.		compatible	compatible	included	included	included	included
Spirometer		compatible	compatible	included	included	included	included
X-Ray Viewer		X	compatible	X	included	included	included
Microscope		X	compatible	X	included	included	included
Endoscope		X	compatible	X	included	included	included
DICOM support		X	compatible	X	included	included	included
Compatible to Advance Medical Devices							
Digital Ultrasound		X	X	✓	✓	✓	✓
Retinal Camera		X	X	✓	✓	✓	✓
Dermascope		X	X	✓	✓	✓	✓
Ophthalmoscope		X	X	✓	✓	✓	✓
Naso-Pharyngoscope		X	X	✓	✓	✓	✓
Sinuscope		X	X	✓	✓	✓	✓
Coloscope		X	X	✓	✓	✓	✓
ENT Otoscope		X	X	✓	✓	✓	✓
Colposcope		X	X	✓	✓	✓	✓
Laparoscope		X	X	✓	✓	✓	✓
Dental Examination		X	X	✓	✓	✓	✓
Various Examination Cameras		X	X	✓	✓	✓	✓
Holter monitor		X	X	✓	✓	✓	✓



LIVE OPD

Hardware Features & Medical Devices

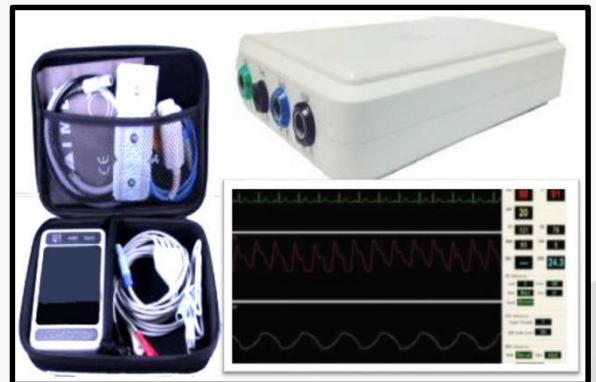
Patient-monitoring System – Six parameters

Performance Parameters

- It includes six parameter monitoring functions (ECG, NIBP, SpO₂, Resp, Temp and PR).
- 5 lead ECG wave, five-level program control gain, three-level filtering technique (diagnostic method, monitoring method and operation method), leads drop-off alarm. HR range: between 0 and 250 BPM. Effective in resisting influence from vibration and electotome
- impedance respiration, five-level program control gain, respiration rate range is between 1-99 BPM.
- Double Temp, testing range is between 20-45°C, display resolution accuracy: 0.1°C, testing accuracy: 0.2°C,
- Testing method of SpO₂ compatible with Nellcor, spO₂ range between 35-100%, HR range between 30 and 250. Besides. it also provides searching. sensor off, PR beats reminding, signal intensity and PR column signal.
- Step-by-step deflation blood pressure measurement: adult or child mode, single. timing, continuous test modes. SYS 60-250, DIA 30-180, PR 30-250 BPM, over voltage protection and asp error reminding function.
- Wireless Bluetooth SPP barrier-free distance is 10 meters.

Physical Parameter

- Single power support, above DC 12V 2A power PCBA recommended.
- quiescent current: 154mAh; Average electronic current: 154mAh, The highest electronic current is 380mAh.
- Detector has the function of automatically connecting the device that was connected last time.
- Small in size, flexible in installment, highly reliable and accurate in testing.
- Rapid, accurate testing. Continuously work
- Directly connecting with System
- EMC Standards: EN60601, EN60601-1-2, E0601-1
- Weight: 0.62KG
- Size: 24cm*16.5cm*5cm



X-Ray Viewer



X-Ray viewer is unique integration in LIVE OPD unit. X-Ray viewer sends high resolution X-Ray images to the doctor which can be viewed to diagnosed on screen.

Physical Parameter

- Body: MS Cabinet with Aluminium Frame
- Sheet: 2 mm Acrylic Sheet
- Power: 12 V, 50-60Hz, 2 Amp
- Bulb: 264 High Glossy Led Bulbs
- Parts: Heavy Duty Switch & Socket Used
- Safety: Shock Proof Mechanism
- Holding: Plastic Clips for X-ray film Holding
- Total Lux: 1000
- X-ray View size: 14"X17"



LIVE OPD

Features

500X Microscope Digital Magnifier Camera

Controller High Speed DSP (Driver Free available)
Frame Rate: 30 f/s Under 600 LUX Brightness
Lens: Dual Axis 500x Micro-Scope Lens, M12
Magnification Ratio: Max. 50x - 500X (Manual)
Digital Zoom: 8x Sequence Mode
Snap Shot / Record Video: Available
Light Source: In-built White Light LED x 8 PCS
(adjustable by control wheel)
Brightness Control Manual adjustment
Illumination Range: 0ML ~ 30000ML (adjustable
wire control for light source)
Video Capture Resolution: 1600x1200, 1280x960,
800x600, 640x480, 352x288, 320x240, 160x120
Still Image Capture Resolution: 1600x1200,
1280x960, 800x600, 640x480, 352x288, 320x240,
160x120
Video Format: AVI
Snap Shot Format: JPEG or BMP
Snap Shot Software and Hardware (optional)
Micro-Measure Tool: It can measure Length,
diameter, angle, perimeter, area, etc.
Micro-Capture bundled software with
measurement & calibration function
Auto W/B by software
Interface USB 1.1 & USB 2.0 Compatible
Power Supply: USB Port (5V DC)



Device Outlook & Standard parts

1. Digital Microscope (1pcs)
2. Connectivity cable
3. Metal fixed Stand (1pcs)

HD 720P Endoscope, Boroscope, Inspection Video Camera

- Resolution : 1080 x 720
- View angle : 60
- Focal Distance : 3cm -- infinite
- Interface : USB 2.0 UVC
- Light : 4 White LED Lights (Adjustable)
- Camera Dimension : 10 x 10 x 51 mm
- Length : 5Meters
- Camera : Waterproof IP-67
- Material : Hard Metal & Plastic
- Weight : Approx. 100g.
- Power : USB Powered
- Color : Black

Device Outlook & Standard parts

- 1 x Endoscope Camera
- 1 x Magnet
- 1 x Small hook
- 1 x Side mirror





LIVE OPD

Network & Bandwidth Customization

WESPEED – internet link aggregator for 3G, 4G cellular networks

Integrated WESPEED internet link aggregator gives you freedom to operate from remote location using multiple 3G and 4G operator dongles. This useful feature gives you complete mobility to operate Live OPD unit from rural areas where consistent connectivity is a big challenge.

WESPEED integration is optional component in Live OPD unit. If you do not need it we can remove it and discount the price of the same.

Live OPD Network Features

- Connectivity – RJ45 (using CAT6 / CAT5 cable)
- Works on DHCP & Static IP
- Integrated WESPEED - internet link aggregator for 3G, 4G cellular networks for bandwidth customization
- Bandwidth requirements – 200kbps to 2 Mbps. Customizable as per resolution and requirements

WESPEED descriptive feature set:

- Combines bandwidth of up to 8 connections
- Handles 3G and 4G (LTE) Wireless broadband from multiple vendors
- Simple dashboard interface monitor connections
- Automatically connects to network when a dongle is inserted
- Supports bonding WiFi and WAN along with 3G & 4G networks
- Compact size and easy to carry
- Ethernet/LAN port to connect with computer, encoder
- WIFI Hot spot to use with Tablets and Mobile phones.
- Zero Configuration, Ready to use device

WESPEED Hardware Interfaces

- USB 2.0 ports: This WESPEED consists of 8 USB ports where in dongles of multi technology is supported (3G & 4G).
- Intel Wireless N7260: Provides WiFi hotspot facility and can output up to 300 Mbps speed.
- Ethernet RJ45 jack: Provides Ethernet output to the combined internet bandwidth by device and can render outputs up to 1 Gbps.

WESPEED Technical Specifications:

- Physical
- 205mm x 120mm x 70mm
- 500gms
- 5 to 45 degree Celsius

Networks supported

- 4G (LTE)
- 3G (HSPA+,HSUPA,HSDPA)
- USB WIFI* (802.11 g)
- LAN (10/100)

Simultaneous Bonding

- Upto 8 WWAN (3G,4G)
- Upto 1 WIFI
- Upto 1 LAN
- Max 8 simultaneous bonding

Output supported

- WIFI hotspot
- LAN
- Max five clients including WIFI and LAN

Audio/Video

- Supports popular field encoders

User Interface

- Monitored and controlled through tablets, smartphone's , laptops over WIFI or LAN

Features

- Automatically detects and dials USB dongles once they are inserted
- Separate profiles for live broadcasting and internet browsing.

Power

- DC Output:12V=3A
- Integrated Battery : 2 hours

Supported dongles

- All operator locked 2.5G/3G/4G dongles supported
- Huawei E303F, E303C, EC 150, EC 156, EC159, E3331, E1750C
- Micromax MMX310G, ZTE AC2787, AC2738, ZTEMF631, K4201 I

LIVE OPD – ADVANCE EDITION ADD-ONS

Digital Ultrasound



Digital Ultrasound

- Small and light
- 15" LCD Screen
- Full Digital Imaging technology
- Pretty & light, Clear images
- Compatible to Multi-frequency probes
- 2-Probe Connector
- Large volume image storage
- 8-segment TGC
- Powerful function, large volume storage
- Silica gel ultrasound keyboard(option)
- Can work with external battery (option)



Digital Otoscope

- Super easy to operate. Focus and brightness are adjustable automatically, no need to manual adjustment.
- A finger touch for taking photo or playing review, zoom in-out of 8 times, left/right movement.
- Optional with a rechargeable Lithium-ion battery, ensure 4~5hrs' continuous working.
- Special optical design allows a larger field of view (up to 40 degrees)
- 2.8" TFT color LCD with ultra-high resolution of 2560*1920.
- Mobility of data storage with a Micro SD card
- Lens made of highest-grade miniature camera
- Date and time displays on screen to record what you see

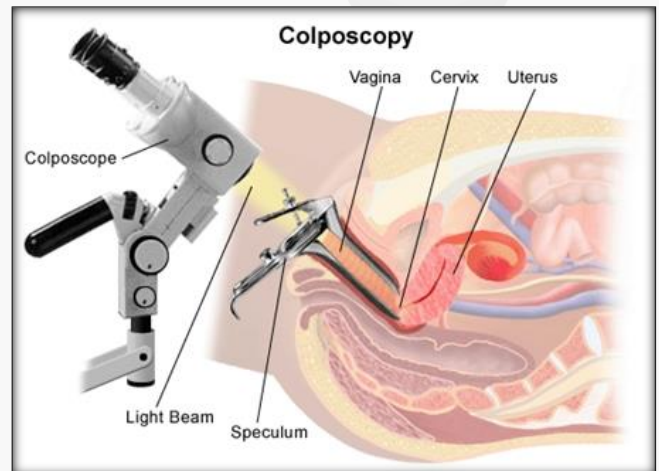
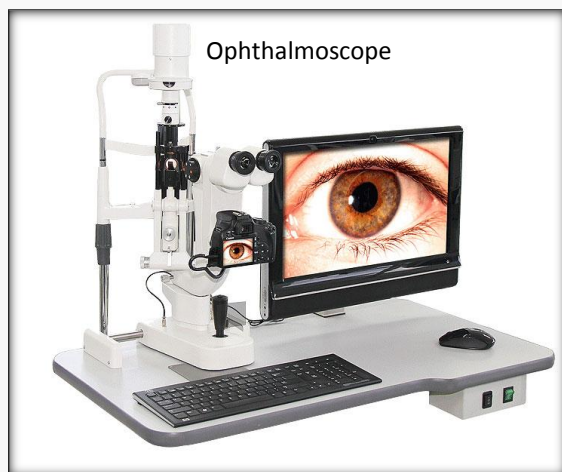
**** PI Note: These add-ons are not available in basic edition of Live OPD unit.
Only available in advance edition of Live OPD at extra cost as applicable.**



LIVE OPD – Connectivity to:

Live OPD connectivity is available with most of the Medical Devices few of them are below:

- Retinal Camera
- Spirometer
- Dermascope
- Ophthalmoscope
- Naso-Pharyngoscope
- Sinuscope
- Coloscope
- ENT Otoscope
- Colposcope
- Laparoscope
- Dental Examination
- Various Examination Cameras
- Holter monitor & many more..



Digital Stethoscope

- Connectivity - With a direct analog audio output
- Superb Sound - One offers the superb audio quality
- No Subscriptions or royalty fees of usage

**** PI Note:** These are connectivity options, which means that OUR LIVE OPD unit is capable of transmitting all the above data images of different equipment with you already have them or would buy them. This unit in itself has inbuilt equipment only mentioned in between page no. 4 to 6.



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