

Upvio Vitals AI System Requirements & Compatibility Guide

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This document provides the minimum specifications required to successfully run the Upvio Vitals AI technology. For questions or deployment support, please contact your Upvio account representative.

Contact details

Website: www.upvio.com

Support Email: support@upvio.com





NETWORK & CONNECTIVITY

A stable, high-quality internet connection (via Wi-Fi or 4G) is required for license validation and accurate operation. The same connection is also used for optional crash reporting and telemetry.

✓ MINIMUM REQUIREMENTS

- 4G LTE / WiFi (minimum 5 Mbps sustained download)
- Maximum latency: 100ms
- Stable connection required throughout measurement

✗ NOT SUPPORTED

- 3G networks (insufficient bandwidth and latency >100ms)
- VPN connections (adds latency and packet loss)
- Public WiFi with <5 Mbps or unstable connections

3G has ~100ms latency and inconsistent bandwidth (2-7 Mbps average), causing frame drops and failed measurements. rPPG requires continuous 30fps video processing - 3G cannot reliably deliver this.



CAMERA & VIDEO

The device must have a camera that meets the following requirements:

Resolution: 640×480 (VGA minimum)

Frame rate: 30 FPS minimum (higher is better)

Sensor: Rolling shutter acceptable; global shutter preferred

Auto-focus: Supported and enabled

✓ OPTIMAL CONDITIONS



- Lighting: 150–200 lux (normal indoor office lighting)
- Distance: 40–80 cm from face to camera
- Position: Camera at eye level, face fills 60–80% of frame



✗ CONDITIONS TO AVOID



- Low-light environments (<50 lux)
- Harsh backlighting or direct sunlight on face
- Camera distance >1 meters
- Low-quality webcams <480p
- Devices with fixed-focus front cameras (older tablets)

Camera quality and environmental conditions are the #1 determinant of rPPG accuracy. Higher quality camera sensors improve measurement accuracy, especially in challenging lighting or unstable environments.



DEVICE COMPATIBILITY

Supported browsers and operating systems



✓ FULLY SUPPORTED & VALIDATED

- iOS 15+ (iPhone X and newer)
- Android 9.0+ (64-bit, 4GB+ RAM)
- Modern Chromium browsers (Chrome 90+, Edge 90+)
- Safari 17+ (macOS Sonoma, iOS 17)



LIMITED SUPPORT (Not Recommended)

- iOS 14 devices
- Android 8.0 (minimum threshold)
- Older desktop hardware (<2017)
- Performance and accuracy are NOT guaranteed on these devices.

✗ NOT SUPPORTED

- iOS 13 and below
- Android 7.1 and below
- 32-bit architecture devices
- 3G-only connectivity
- Devices with <4GB RAM



TROUBLESHOOTING

Here are quick fixes based on the most common setup hurdles to get your Upvio Vitals AI back on track and performing at its best.

Measurement fails or times out.

- Check network speed (must be >5 Mbps, <100ms latency)
- Ensure device meets minimum specs
- Verify lighting conditions (not too dark or bright)

Low confidence or inaccurate readings.

- Improve lighting to 150-200 lux
- Move camera closer (40-80cm range)
- Ensure face is centered and fills frame
- Upgrade from 3G to 4G/WiFi

Browser reports 'SharedArrayBuffer not available.'

- Verify COOP/COEP headers are configured on server
- Check iframe allowcross-origin-isolated attribute
- Test in supported browser (Chrome 90+, Safari 17+)



BANDWIDTH TESTING

Before rolling out Vitals AI, test network quality:

1. Run speed test at deployment location

Minimum: 5 mbps download, 2 mbps upload

Recommended: 10+ mbps download, 3+ mbps upload

2. Verify latency

Maximum acceptable: 100ms

Recommended: <50ms

3. Test during peak usage times

Ensure consistent performance when network is congested

Tools: speedtest.net, fast.com, or contact Upvio support for deployment validation kit.





VITALS AI SUCCESS CHECKLIST

To ensure your users get the most accurate results from Upvio Vitals AI, follow these simple Do's and Don'ts.

✓ DO's

- ✓ Use devices meeting minimum specs (Android 10.0+ / iOS 14+, 4GB RAM)
- ✓ Ensure 4G LTE or WiFi with >5 Mbps stable connection
- ✓ Position camera 40-80cm from face at eye level
- ✓ Use normal indoor lighting (office/home environment)
- ✓ Keep face visible and centered during measurement
- ✓ Allow camera and network permissions
- ✓ Use native apps or supported browsers (Chrome, Safari 17+, Edge)
- ✓ Test connection speed before deployment

✗ DON'Ts

- ✗ Use 3G networks, unreliable public WiFi, or restricted work networks
- ✗ Connect via VPN during measurements
- ✗ Use devices older than specifications (e.g., Android 9 or below)
- ✗ Attempt measurements in poor lighting (<50 lux or harsh sunlight)
- ✗ Position camera >1.5m away or off-angle
- ✗ Use low-quality webcams <480p resolution
- ✗ Block camera with hands or objects during measurement
- ✗ Run on browsers without WebGL2 or SharedArrayBuffer support

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