January 2024

Paravision Liveness Datasheet



Integrating an advanced frontend SDK and Docker-based backend software suite, Paravision Liveness delivers highly accurate yet fully passive liveness detection serving a wide range of digital identity use cases. Paravision Liveness is certified ISO 30107-3 Level 1 and Level 2 compliant by iBeta, protecting against a broad array of physical presentation attacks, ranging from photo printouts to high resolution video displays to three dimensional masks. In concert with Paravision's industry-leading face recognition and broader Authentic Identity product family, the new technology marks a significant advancement in the realm of remote identity verification, bolstering security, decreasing user friction, and improving access across demographic groups.



Paravision Liveness is highly optimized for digital identity verification use cases and leading operating systems and imaging architectures. The technology enables liveness with standard cameras such as smartphone selfie cameras or webcams that use standard visible light (RGB) imaging. Paravision Liveness delivers security and convenience, powered by a unique combination of features:

- a. Docker-based, server-side liveness supported by an optional front-end live video validity check SDK.
- b. Advanced metrics for intuitive live user feedback, including Paravision's NIST-tested face image quality metrics.
- c. High performance on single frame, standard selfie images, serving a range of applications where front-end SDK integration may not be possible.

Paravision Liveness is cloud-ready and deployable as a module within Paravision's broadly deployed Docker container products, enabling easy deployment for new or existing Paravision partners.

User Interface Reference Apps

Paravision provides full reference apps with UI/UX recommendations as well as sample apps with source code that can be used for rapid, low-risk development.



Supported Computing Environments

Paravision supports a wide range of computing environments, enabling our technology on a wide variety of platforms. Paravision proudly partners with leaders from Silicon Valley and around the world to deliver outstanding price, performance, availability, and support:

On-Premises / Private Cloud	Google Cloud Platform	Amazon Web Services	Microsoft Azure
	Google Cloud	aws	Azure

Liveness Detection

Desktop/Server				
NVIDIA	Intel			
NCENTION PROCESSM	inal partner alliance			
Supported Computer Vision Framework				
	©penVIN©			

Validity Checks

Mobile		Desktop/Server		
Apple silicon	Arm	NVIDIA	Intel	
É	arm		Intel partner all ance	
Supported Computer Vision Framework				
	<mark>O</mark> PyTorch		⊚penVIN©	

System Architecture



Technical Specifications

	Mobile Validity SDK	Paravision Processor Docker
Supported programming languages	Swift - iOS Kotlin - Android	C++ / Python Wrapper
Supported operating systems	iOS 13+ Android 8.0+ (API ver 26)	Windows Server 2019 Datacenter Linux Ubuntu 20.04
Supported hardware platforms & computer vision frameworks	Apple Silicon Arm (PyTorch)	Intel (OpenVINO) NVIDIA (TensorRT)
Details	Calculated on a single, 2D/RGB selfie face image	Optimized for Level 1 and Level 2 on Mobile, functional on WebCam
	Live image quality / user feedback	Calculated on a single, 2D/RGB selfie face image
		Live image quality / user feedback

Certifications

iBeta: ISO 30107-3 Level 1 and Level 2 Compliant