

## Intel RealSense ID for Facial Authentication

Product Brief



### Advanced hardware and software purpose-built for facial authentication

Intel® RealSense™ ID F450/F455



### The Solution

Intel® RealSense™ ID is a trusted and accurate on-device, facial authentication solution built on Intel's leadership in vision technology and AI. It combines an active stereo depth sensor with a specialized neural network to deliver a secure solution that adapts over time.

Intel RealSense ID simplifies secure access and entry for everyone, everywhere. It supports people of varied heights and is designed to learn and adapt in real-time for Access Control, Kiosks, Point-of-Sale, ATMs and more.

### Everyone, Everywhere

Intel RealSense ID authenticates users in less than a second with a glance. It combines industry leading hardware and AI vision software to ensure reliability in varied conditions. It reliably supports every skin tone and shade providing a natural interaction for most people.

Intel RealSense ID also works in lighting conditions from complete darkness to strong sunlight. The specialized neural network allows the solution to adapt to changes over time - different hairstyles, facial hair and more.

### Privacy Driven

Intel RealSense ID does not store face images, personal data, or any other identifiable information. Instead, Intel RealSense ID takes a faceprint – like a fingerprint, unique to each person's face – leveraging our vision AI software to determine a match, with one in a million false acceptance rate (FAR). The faceprint cannot be reconstructed into a face image, protecting user's privacy.

### Purpose Built for Facial Authentication

Designed with a large vertical field of view, Intel RealSense ID can authenticate people from 120 cm to 190 cm tall at a 55cm distance and supports users from 0.3 m to 1 m away from the sensor<sup>2</sup>.

A low power system, Intel RealSense ID consists of an SoC for data processing on device, with dual cameras for authentication, IR illuminators to allow indoor and outdoor operation, a Secure Element to protect your privacy and a specialized neural network to adapt over time.

### Easy to Integrate

Intel RealSense ID SDK is designed to plug into your user authentication systems. Scalable, with configuration flexibility for edge, local host or server-based solutions.

### Solution Specifications

Use Environment	Indoor/Outdoor
Operating Temperature	0° to 55° C (Peripheral) 0° to 60° C (Module)
Field of view (H x V)	59° x 80°
Recommended Range	0.3-1 meter
Interfaces	
Peripheral	- Host: USB - AUX: SPI, GPIOs
Module	- Host: USB2/UART - AUX: SPI, GPIOs, I2C
Operating System <sup>1</sup>	Windows/Linux/Android
Dimensions	Width x Length x Depth
Peripheral	- 62 mm x 32.5 mm x 11 mm
Module	- 50 mm x 18 mm x 4.4 mm