Human Vision Components (HVC) Sensor

The HVC sensor incorporates Omron’s unique image recognition algorithm (OKAO), giving it the ability to detect faces at very high speeds and accuracy. The following functions are included with each HVC sensor:

- Face Detection
- Face Recognition
- Age/Gender Estimation
- Gaze Estimation
- Facial Pose and Blink Estimation
- Facial Expression Estimation
- Hand and Body Detection
**Face Detection Technology**

**HVC Sensor**

The HVC sensor offers best in class facial detection technology that is easy to use on a self-contained device. The sensor allows designers to add intelligence and functionality to many applications and products with minimal effort.

**Features**

**Face Detection**
The HVC sensor can detect faces of various sizes quickly and accurately.

**Face Recognition**
A person in various facial poses, expressions, and illumination conditions can be recognized by the sensor by comparing his or her face with faces already registered in a database.

**Age / Gender Estimation**
The sensor can estimate the age and gender of a face in various expressions and illumination conditions.

**Facial Pose, Gaze and Blink Detection**
The facial pose and gaze direction of a face can be estimated by the sensor, along with blink estimations in various illumination conditions.

**Facial Expression Estimation**
The HVC sensor can estimate, automatically, various facial expressions (Neutral, Happy, Sad, Angry and Surprised).

**Hand Detection**
Can detect the human hand when displayed in front of the sensor.

**Human Body Detection**
The sensor can detect the human body when a face is not clearly visible.

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**Note:** Additional information can be found on the Omron website

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