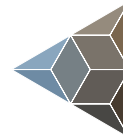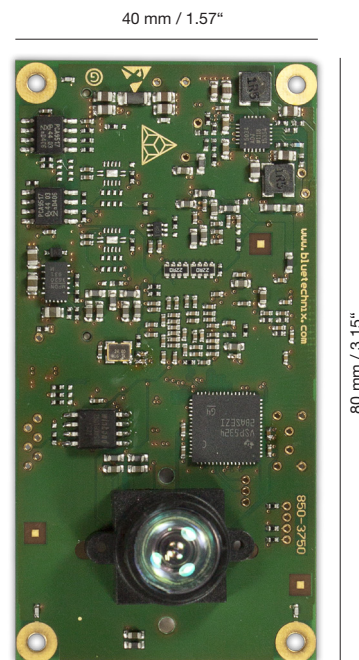# TIM-UP-OPT8140

ToF Depth Sensor Module

BLUETECHNIX
Embedding Ideas

The modular ToF Kit is a very new building blocks system. It guarantees the maximum flexibility and builds the basis for your customer specific ToF solution.

Time of Flight Image Sensor Modules (short TIM) vary in size, supported sensor, aperture angle and integrated functionality.
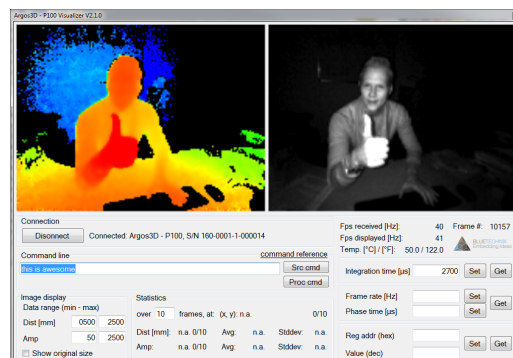
This smart depth sensor module delivers a 3D point cloud including distance and intensity. Using active IR illumination, the sensor is able to capture depth and intensity information at a resolution of 320 x 240 pixels at a field of view of 90 ° and a size of only 40 x 80 mm independently of ambient light. Therefore, you get 76.800 independent distance values in real time.

40 mm / 1.57"

80 mm / 3.15"

Smart, Small & low-priced

Highlights

- » **ToF Module Concept**
- » **320 x 240 pixel (QVGA)**
- » **90 ° Field of View (default)**
- » **USB 2.0 and PVI Interface**
- » **40 x 80 mm / 1.57" x 3,15"**

Sample ToF distance and greyscale information

TIM-UP-OPT8140

ToF Depth Sensor Module

BLUETECHNIX
Embedding Ideas

Feature Overview

Form Factor	40 x 80 mm / 1.57" x 3,15"
Sensor	TI OPT8140
Pixel	320 x 240 QVGA
Aperture Angle	90 °
Depth Data calc on module	Yes
Output	3D Pointcloud
Interfaces	USB 2.0, PVI, SSI, I²C
Power Supply	5 V_{DC}
Temperature Range	0 to +70 °C

* FPS & Range depends on integration time, ambient temperature and
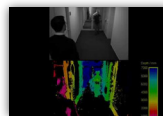 software configuration

Applications

» **Automation and Control**
  » Range Measurements
  » Goods Counting
» **Robotics**
  » 3D Safety Area
  » Map Building
  » Navigation
  » Obstacle detection
» **Gesture Recognition**
  » Touch less Control
  » Gaming Industry
  » HMI for Industrial Robots
» **Building Automation**
  » Security Appliances
  » People Counting
  » Safety Access Control

Customization

The depth sensor module concept is focused on modularity. Individual base boards with your required interfaces can easily be implemented.

Bluetechnix as one of the leading ToF experts ensures with this unique ToF module a new and very efficient way to build up customized depth sensing systems rapidly.

Ordering Information

Order No.	Info
150-2205-1	TIM-UP-OPT8140 USB2.0 PVI Time-of-Flight sensor module