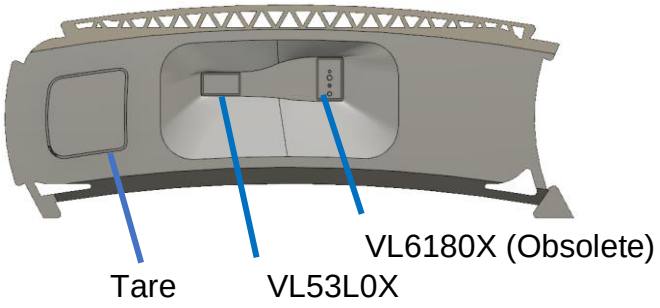
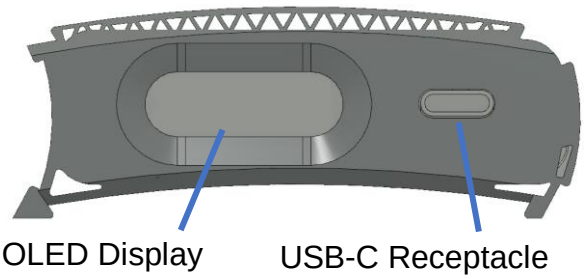
**Datasheet**

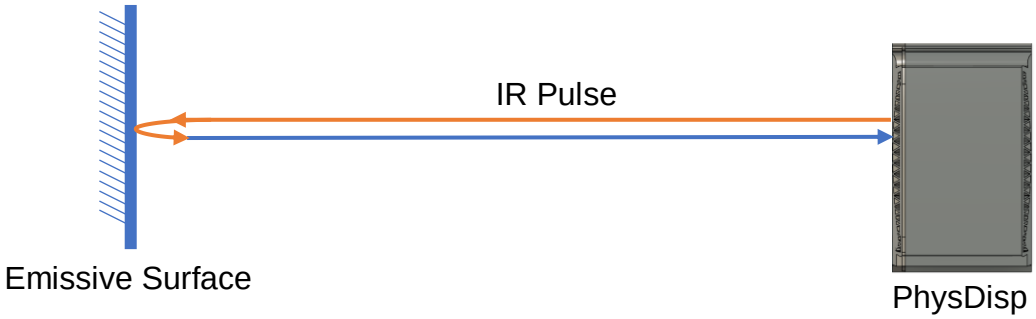
# Qosain Scientific PhysDisp

## Introduction:

Based on a patented light time of flight (ToF) technique, PhysDisp is a modern contactless displacement sensor. PhysDisp can consistently measure linear positions, lengths, and displacements, automatically switching ranges and resolutions depending on the proximity from and area of the marker. Connect it with the PhysLogger App or use it as a handheld standalone device.




## Features:

- Negligible dependence on surface reflectivity
- IR-based time of flight (ToF) technique
- PhysInstrument Class: Digital
- Connects with PhysLogger
- Easily mounted with a compatible bracket
- No configuration required
- Hardware tare button

## Specifications:

- Range: 5 mm to 1200 mm
- Display: Inbuilt
- Resolution
  - Resolution for 5 to 100 mm: 0.2 mm
  - Resolution for 30 to 1200 mm: 0.5 mm
- Sensors: VL6180X (Obsolete) and VL53l0X
- Mechanical
  - Weight:

## Standalone Interface

- Display:
  - Distance displayed in mm.
- Tare:
  - Press “Tare” to adjust offset to force zero output
  - Press and hold “Tare” for more than 3 seconds to reset tare offset

## Typical Applications

- Imitate Galileo's inclined plane observations and gravity measurements
- Explore engine cycles—mount on and track the motion of pistons
- Investigate collisions, conservation of energy and momentum
- Use it as a handheld length measuring device in an array of experiments
- Contact sensing

## Resources

- Instrument URL: www.physlogger.com/PhysDisp.html
- Discussion: www.community.physlogger.com/c/physinstruments/physdisp/51