

INDUSTRIAL PRODUCT DATASHEET

HPS-167 ToF Infrared Distance Measuring sensor(0.08-35m)

HPS-167 ToF infrared distance sensor offering up to 35m absolute range, 54Hz data rate, 3.3V UART, and IEC62471 Class 0 eye safety.

SKU

101990340

UPDATED

2026-08-19 11:50:47

PRICE

\$99.00(Excl. VAT)



Overview



HPS-167 is an upgraded ultra-high-performance Time-of-Flight (ToF) infrared ranging sensor with newly-designed emitting and receiving optical lenses, providing accurate distance measurement regardless of target color and reflectivity up to 35m on a white target. It integrates an 850nm infrared LED emitter, high-sensitivity photodiode, embedded data processing and filtering, 115200bps 3.3V UART interface, ambient light and temperature compensation, and measures 35 x 24 x 21.5 mm at 8g.

Key Features

Description

HPS-167 is an upgraded ultra-high-performance Time-of-Flight (ToF) infrared ranging sensor with newly-designed emitting & receiving optical lens, suitable for precise, long-distance measurements. It provides accurate distance measurement whatever the target color and reflectivity unlike conventional technologies. HPS-167 can measure absolute distances up to 35m on a white target, setting a new benchmark in ranging performance levels, opening the door to various new applications.

HPS-167 integrates a high-power 850nm infrared LED emitter and a high-sensitivity photodiode (PD) coupled with internal physical infrared filters, enables longer ranging distance and higher immunity to ambient light.

Advanced embedded data processing & filtering algorithm realizes extremely stable and real-time measurement outputs.

Features:

- Fast, accurate distance ranging
 - Measures absolute range up to 35m (white target) with accuracy indication
 - Adaptive output data rate up to 54Hz
 - Measuring result is not sensitive to the target color and reflectivity
 - Embedded electrical & optical cross-talk compensation
 - -10°C~+55°C temperature compensation
 - Ambient light compensation enables accurate measurement in high infrared ambient light levels
- Fully integrated miniature module
 - 850nm infrared LED emitter
 - Emitter driver
 - Integrated optimally-designed emitting & receiving optical lens
 - Ranging sensor with advanced embedded micro controller
 - Advanced embedded data processing & filtering algorithm
 - 115200bps 3.3V UART interface

- 35(W) x 24(H) x 21.5(D) mm, 8g

- Eye safety

- Compliant with latest Photobiological Safety of Lamps and Lamp Systems Standard

IEC62471(Class 0), CE, FCC, RoHS

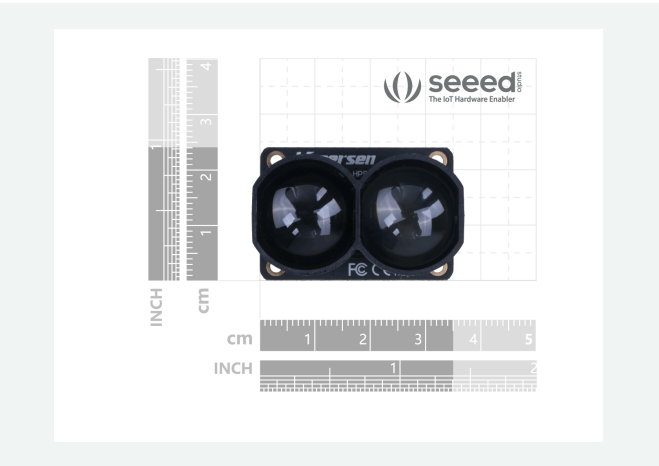
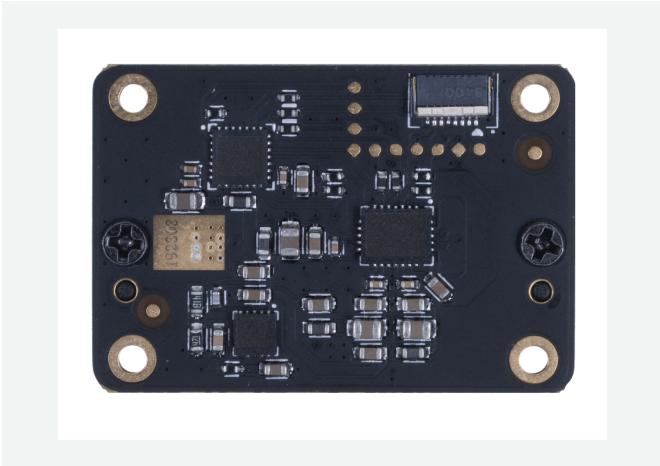
Mechanical drawing & device pinout

Application schematic

Technical Details

Technical details

Product Gallery



Part List

HPS-167	1
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Compliance & Logistics



HSCODE	9031900090
USHSCODE	9031902100
EUHSCODE	9013101000
COO	CHINA

Resource Links

- <https://www.seeedstudio.com/HPS-167-ToF-Infrared-Distance-Measuring-sensor-0-08-35-p-3144.html>
- [HPS-167 Datasheet](#)
- [CE-EMC Report](#)
- [FCC-VOC Report](#)
- [RoHS Report](#)

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