

# StreamLine

## 4786 StreamLine Laser Distance Sensor 4 m with Box



*See indication of scale below*

The 4786 StreamLine Laser Distance Sensor 4 m with Box is a fully featured distance measuring solution. It offers great monitoring capabilities and low power consumption. The module comes equipped with an infra red laser distance sensor and BLE integration options.

### Key features

#### General

- IP65 rated enclosure
- Very small, only 76 x 85 x 20 mm
- Wide operating range: -20°C ... +70°C
- 1 LED for user interaction
- Multiple watchdog levels for maximum stability
- Event based free configurable module to fit any job
- Remote configurable to fit any job (both firmware and configuration files can be updated/patched over-the-air)
- Supports integration into third party networks

#### Connectivity

- LoRa technology, EU-868 MHz
- Compatible lora based solutions such as: private LoRa networks or Helium
- BLE beacon technology

#### Positioning

- Where available LoRa localization

#### Electrical

- +3,2 ... +3,6 VDC non-rechargeable battery

#### Sensors

- Accelerometer accurate up to 16 g
- Distance sensor accurate up to 4 m
- Temperature sensor accurate up to 0,5°C

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## Product summary

The 4786 StreamLine Laser Distance Sensor 4 m is capable of accurately measuring from 4 centimetres up to 4 metres using an infra red laser. The sensor can be adjusted to adapt to the intended measurement with the addition of an IR lens when the module is expected to be used in harsh light.

The module offers an array of options in its settings. It can be set up to trigger a measurement or LoRa message for various reasons. Such as: Timers, movement, or temperature thresholds or external signals. The module can be used to facilitate wireless integrations using beacon technology. The 4786 StreamLine Laser Distance Sensor 4 m can for instance be used to automatically identify the attached asset or location by forwarding its local BLE signal. Simplifying asset tracking, location detection and lifecycle management.

The module can be customised to specification when ordered in large volumes. Ask your StreamLine products supplier for more details.

## Connectivity specifications

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|--------------------|--|
| • LoRa             | • Semtech SX1272 transceiver with onboard antenna <ul style="list-style-type: none"><li>○ Frequency: 868 MHz</li><li>○ Protocol: LoRaWAN 1.0.2 and custom LoRa</li><li>○ Transmitting power: Up to +20 dBm</li><li>○ Sensitivity: -137 dBm</li></ul> |
| • BLE (RF 2.4 GHz) | • Nordic nRF51822 <ul style="list-style-type: none"><li>○ Protocol: Bluetooth Low Energy and custom 2.4 GHz protocol</li><li>○ Transmitting power: Up to +4 dBm</li><li>○ Sensitivity: -93 dBm (BLE)</li></ul>                                       |
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## On-board sensors

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- |                         |  |
|-------------------------|--|
| • Accelerometer         | • Sensitivity: light vibrations of 0,016 g up to movements of 16 g |
| • Temperature sensor    | • Sensitivity can be adjusted over-the-air                         |
|                         | • Set alarm thresholds at specified temperatures                   |
|                         | • Accurate up to 0,5 °C  |
| • Laser distance sensor | • A highly accurate Infra Red laser distance sensor (VL53L1x)      |
|                         | • Up to 4 meters   |
|                         | • Optimal performance indoor and outdoor to 1,5 meters             |
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## Operating conditions

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- |               |                   |
|---------------|-------------------|
| • Humidity    | • 10 ... 90%      |
| • Temperature | • -20°C ... +70°C |
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## Battery connector



Pin	Description
• 1	• +3,2 ... +3,6 VDC non-rechargeable battery connection
• 2	• Ground

## Indication of scale



*Size: 76 x 85 x 20 mm*

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## About StreamLine IoT BV

StreamLine IoT BV is part of a group of companies active in the industry of track & trace modules, IoT solutions and internet portal services since 1995.

## Disclaimer

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