

INDUSTRIAL PRODUCT DATASHEET

Grove - Doppler Radar (BGT24LTR11) - 24GHz Transceiver

Compact 24GHz Doppler radar transceiver for high-precision movement and speed sensing in smart home, building, industrial, and UAV applications.

SKU

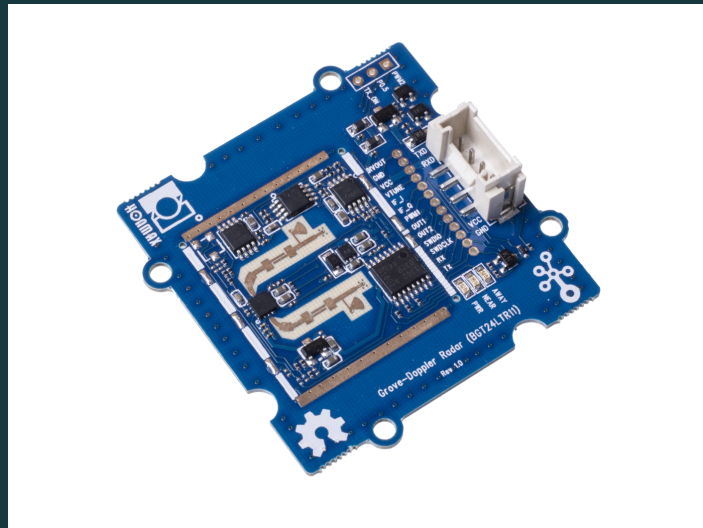
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UPDATED

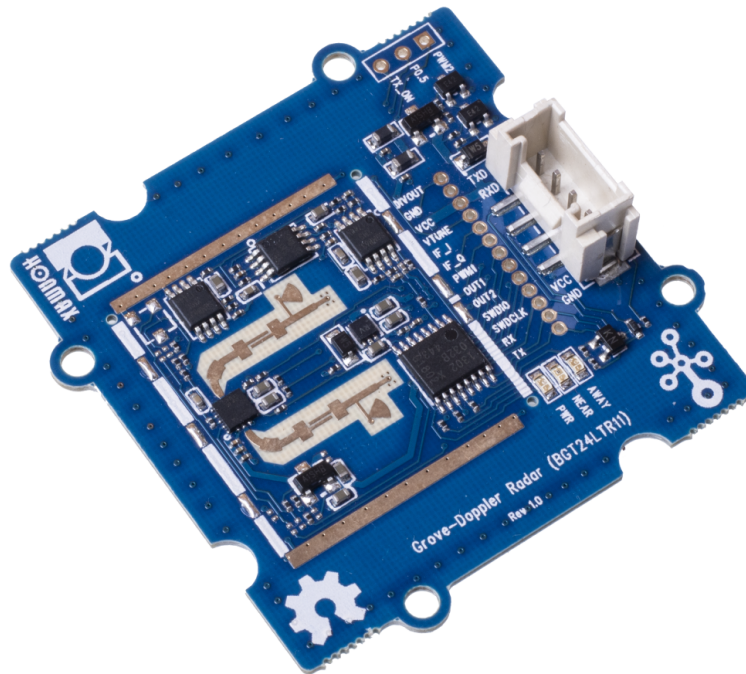
2026-08-26 01:03:33

PRICE

\$65.90(Excl. VAT)



Overview



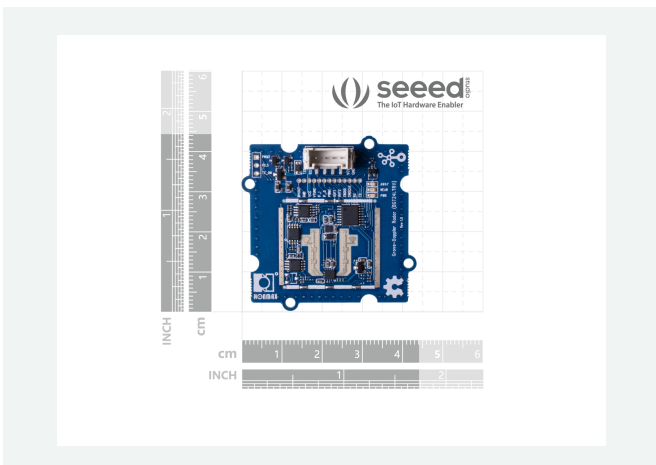
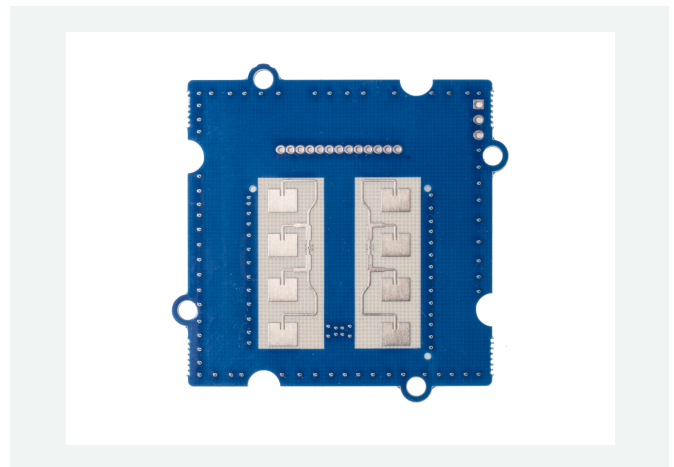
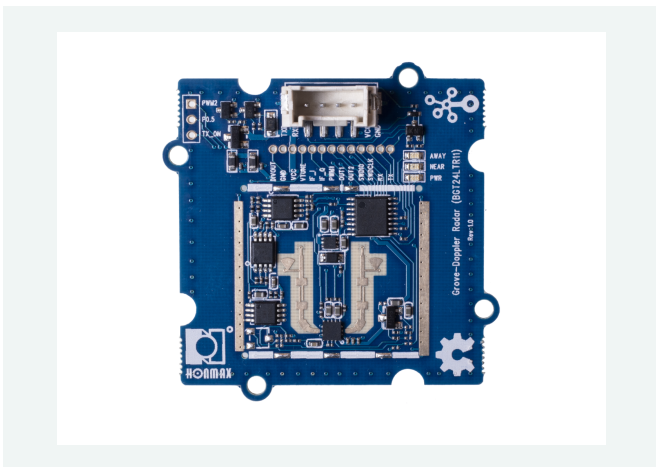
The Grove - Doppler Radar (BGT24LTR11) - 24GHz Transceiver is the first radar-based sensor in the Grove Family, featuring a compact, light-weight, low-power 24GHz Transceiver MMIC for high-precision movement and speed measurements with fast response, ESD protection, high penetration, and operation through harsh weather conditions. It is suitable for applications such as Smart Home, Smart Building, Automatic Door, Lighting Control, Industrial Robotics, Intruder Alarm Systems, and UAV.

Key Features

Features

- The first radar-based sensor in the Grove Family
- Compact size for easy deployment
- Light-weight design, suitable for UAV applications
- Low power consumption for prolonged usage
- 24GHz Transceiver MMIC for high-precision measurements of movement and speed
- Fast response using electromagnetic waves
- ESD protection to avoid system failures caused by ESD strikes
- High penetration which allows it to be deployed behind an object
- Maintains operation through harsh weather conditions (temperature, light, dust, rain)

Product Gallery



Specification

MMIC	BGT24LTR11
MCU	XMC1302 Arm® Cortex®-M0
Transmission Frequency	Min: 24GHz
	Typical: 21.125GHz
	Max: 24.25GHz
Output Power (EIRP)	7dBm @ 25°C
Update Time	300ms
Communication Interface	UART (115200)
Detection Distance	10m @ 0dBsm
Standard Detection Field	65° / horizontal (-6dB)
	22° / vertical (-6dB)
Supply Voltage	3.3-5V
Weight	5g

Applications

- **Smart Home**
- **Smart Building**
- **Automatic Door**
- **Lighting Control**
- **Industrial Robotics**
- **Intruder Alarm Systems**
- **UAV**

Part List

- 1 x Grove - Doppler Radar
- 1 x Grove Cable

Compliance & Logistics



HSCODE	8529905000
USHSCODE	8526100040
UPC	841454123125
EUHSCODE	8517600000
COO	CHINA

Resource Links

- <https://www.seeedstudio.com/Grove-Doppler-Radar-BGT24LTR11-p-4572.html>

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