

Contactless Vibration Sensor based on Doppler Radar Sensor technology

Reality AI and FUJITSU COMPONENT LIMITED joint development

Advanced Technology

Contactless vibration sensing for the industrial and manufacturing sectors

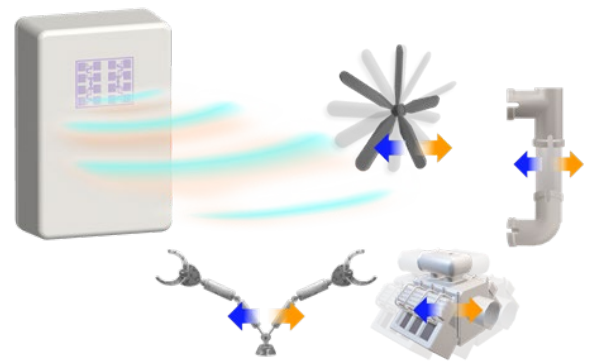
■ Features

Contactless vibration sensing based on Doppler radar sensor technology.

■ Easily deploy sensors

The radar sensor allows for vibration monitoring even under the environments where other sensors are hardly placed such as:

- High temperature of the mounting surface
- Difficulty of access
- Corrosive or explosive environments

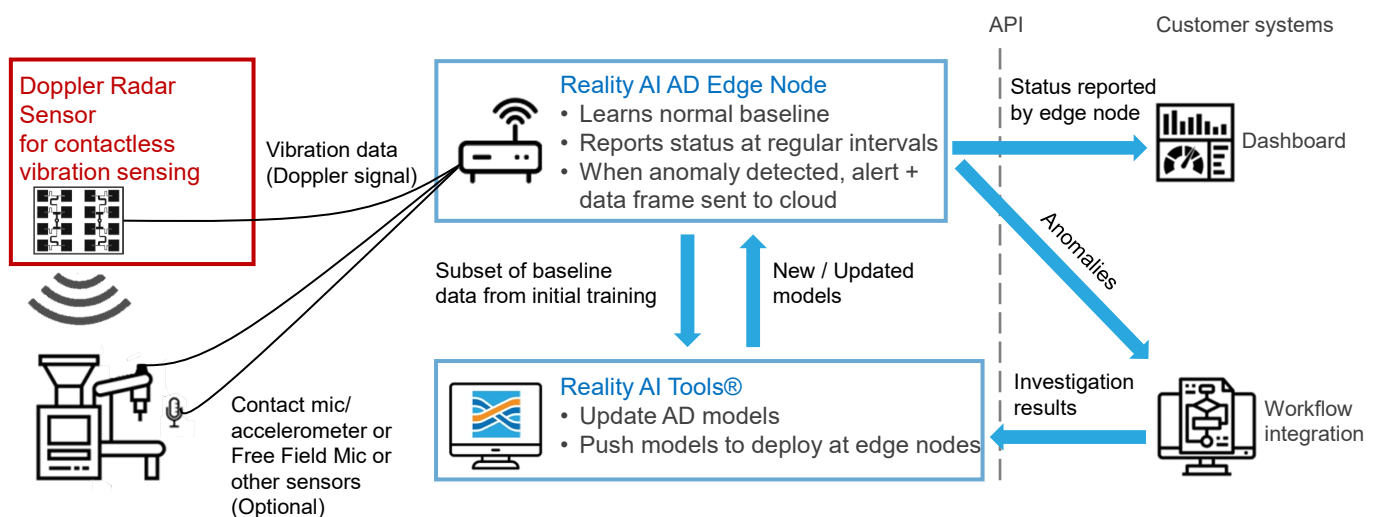


■ Applications

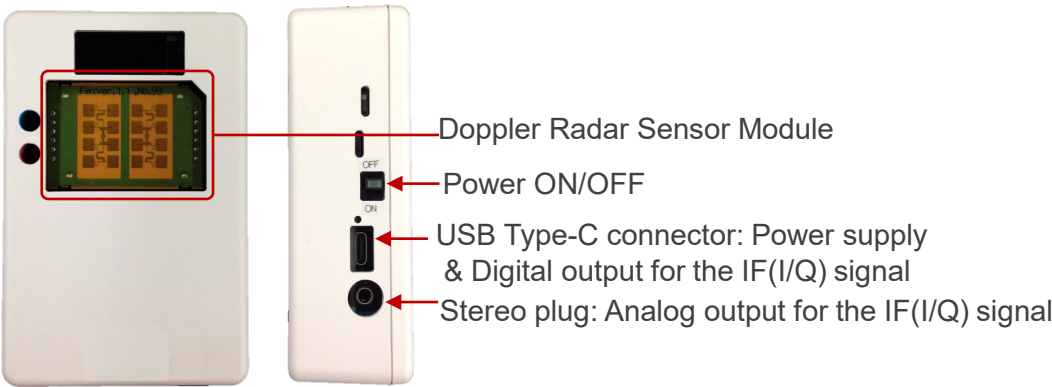
Solution for AI-driven, machine-level analytics for industrial and manufacturing sectors.

■ RealityCheck AD™ for industrial anomaly detection with vibration sensors.

- Automatically collect baseline and detect anomalies
- Detect remaining useful life, known anomalous conditions, and unknown anomalies
- API for integration with dashboarding and workflow systems
- Industrial-grade edge nodes and sensors from name-brand partners



■ Structure of Doppler Radar Sensor Unit Exhibition sample

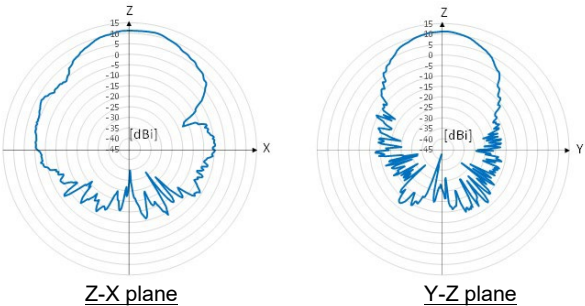
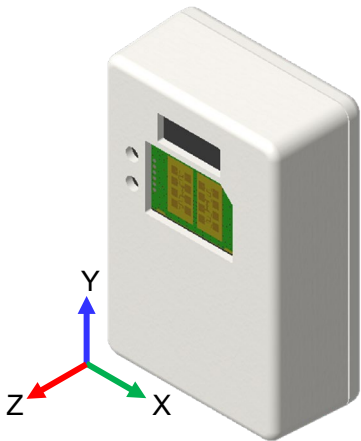


■ Specifications

Doppler Radar Sensor Unit

- 24GHz Doppler Radar Sensor
- Compliant: FCC Part 15.245, ISED RSS-210 Issue 9, Annex F (ARIB STD-T-73 V1.2 for Japan)
- Frequency range: 24.075 GHz to 24.175 GHz (24.05 GHz to 24.25 GHz for Japan)
- Full beam width @-3 dB: Horizontal 45 degrees, vertical 38 degrees
- Host Interface: USB type-C for digital signal output (2 kHz sampling rate) or stereo plug for analog signal output
- Outline Dimensions: 70 x 35 x 105 mm
- Weight: 105 g
- Water-resistant, dust-resistant, explosion-resistant options are also available

Item		Condition	Min	Typ.	Max	Unit
Full beam width @-3 dB	Azimuth	Horizontal	-	45	-	°
	Elevation	Vertical	-	38	-	°
Antenna gain		24.1 GHz	-	12	-	dBi



Contact

FUJITSU COMPONENT LIMITED
 Shinagawa Seaside Park Tower
 12-4, Higashi-shinagawa 4-chome,
 Shinagawa-ku, Tokyo, 140-0002, Japan
 Web: www.fcl.fujitsu.com/

Contact form ▼

<https://www.fcl.fujitsu.com/en/contact/form/2c1p2/>



m/2c1p2/

Product information ▼

<https://www.fcl.fujitsu.com/products/sens>



ors/

Copyright

All trademarks or registered trademarks are the property of their respective owners.
 The Reality AI®, Reality AI Tools® and RealityCheck AD™ word mark and logos are registered trademarks or trademarks owned by Reality Analytics Inc.
 Fujitsu Component Limited or its affiliates do not warrant that the content of datasheet is error free. In a continuing effort to improve our products
 Fujitsu Component Limited or its affiliates reserve the right to change specifications/datasheets without prior notice.
 Copyright 2022 FUJITSU COMPONENT LIMITED