

US67-V1T-BLE**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

Our wireless sensor is ideally suited for retrofitting in the field. Together with the Weidmüller Gateway IoT-GW30, the data collected by the sensor can be temporarily stored and transferred to a cloud or local system.

General ordering data

Version	Smart vibration sensor, Wireless
Order No.	2751260000
Type	US67-V1T-BLE
GTIN (EAN)	4064675022480
Qty.	1 items
Delivery status	This article will no longer be available in the future.
Last order date	2025-07-30T00:00:00+02:00

Technical data

Approvals

Approvals



ROHS	Conform
UL File Number Search	UL Website
Certificate no. (cULus)	E337701
Certificate no. (cULusEX)	E539531

Dimensions and weights

Depth	66 mm	Depth (inches)	2.5984 inch
Height	55.5 mm	Height (inches)	2.185 inch
Width	66 mm	Width (inches)	2.5984 inch
Diameter	66 mm	Net weight	291.2 g

Temperatures

Storage temperature	-40 °C...80 °C	Operating temperature	-20 °C...60 °C
Humidity at operating temperature	5...95 % rel. humidity, no condensation		

Environmental Product Compliance

RoHS Compliance Status	Compliant
REACH SVHC	No SVHC above 0.1 wt%

General data

Explosive risk zone	ATEX Zone 2 Ex ec IIC T4 Gc, UL/cUL, Class I, Division 2, Groups A, B, C and D, IEC 60079-0, IEC 60079-7	Safety category	No
Applications	for indoor and outdoor use	Machine vibration assessment included	Yes
Explosion protection type	Ex e	Air pressure (operation)	≥ 795 hPa (height ≤ 2000 m) as per DIN EN 61131-2
Protection degree	IP67, IP66		

Sensor

Physical measurement principle of the sensor	Vibration acceleration	
Frequency range configurable	No	
Sensitivity vibration acceleration sensor (mV/gravity g)	112	
Vibration acceleration, min. (gravity g)	-16	
Sensor temperature	Monitored value	Temperature
	Type of sensor	Temperature MEMS
	Measurement accuracy	+/-1°C
Temperature range measuring head	Temperature, min.	-20 °C
	Temperature, max.	60 °C
Device is calibrated	No	
Sensor measuring method acc. to ISO10816-3	3-axis broadband analysis 10 Hz...1 kHz, VRMS	
Vibration acceleration, max. (gravity g)	16	

Technical data

Output interval	10s, 10m, 1h	
Measurement range	corresponding to the maximum vibration acceleration	
Measuring unit vibration velocity (RMS)	mm/s	
Accuracy of temperature measurement	1 %	
Number of measuring axes	3	
Transmission intervall of signals	10 s, 10 min, 1 h	
Spectral analysis method (FFT)	3-axis spectral analysis 10 Hz...3,3 kHz, acceleration spectrum	
Frequency range, min.	10 Hz	
Frequency range, max.	3300 Hz	
Measured temperature value, min.	-20 °C	
Measured temperature value, max.	60 °C	
Sampling frequency	6.6 kHz	
Sensor vibration	Monitored value	Acceleration
	Type of sensor	tri-axial MEMS
Monitoring	Vibration monitoring acc. to DIN ISO 10816-3	

Communication

Version	Wireless	Antenna characteristics	Integrated omni-directional antenna
Communication range, max., line-of sight	90 m	Communication range, max., in shop floor	30 m
Bluetooth module	Bluetooth Low Energy, 2.4 GHz RF Transceiver		

Electrical data

Output signal	Process data can be evaluated on the gateway	Alarm function	Configurable on the gateway
IO-Link available	No	Measuring and process variables	Peak value vibration acceleration, RMS vibration acceleration, RMS vibration velocity, FFT spectrum, Crest value, Temperature, Battery voltage, Signal strength

Housing

Basic material	Stainless steel 1.4404 (V4A), AISI 316L & plastic PA 66	Cover material	PA 66
Socket material	Stainless steel		

Installation

Connection thread	M8 socket	Tightening torque, max.	30 Nm
Tightening torque, min.	20 Nm	Tightening torque	25 Nm
Type of mounting	Screw mounting, Direct mounting, Mounting plate, Adhesive fastening, Magnet, Miscellaneous	Type of thread	Inner thread
Type of mounting sensor	Many possibilities using adapters, Direct mounting: screw connection	Wrench size	22 mm
Mounting thread	M8	Installation location	Indoor and outdoor use
Sealing with tie possible	Yes	Suitable for retrofitting	Yes

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Insulation coordination

Surge voltage category	II	Rated voltage	50 V secondary circuits
Pollution severity	2		

Power supply

Type of power supply	Battery	Number of battery cells	1
Wireless	Yes	Battery size	AA/Mignon/R6
Battery replaceable	Yes	Battery type	Lithium
Battery voltage	3.6 V	Battery capacity	2.2 Ah
Battery lifetime	Typ. 3 years (at a transmission interval of 1h and an operating temperature between +15°C...+25°C)		

Measuring voltage input

Frequency range, max.	3300 Hz	Frequency range, min.	10 Hz
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Classifications

ETIM 8.0	EC004309	ETIM 9.0	EC004309
ETIM 10.0	EC004309	ECLASS 14.0	27-20-14-12
ECLASS 15.0	27-20-14-12		

Example of use

