TEKTELIC VIVID v2

LoRaWAN® connected Home and Office Environment Monitoring

The enhanced TEKTELIC VIVID v2 features a rugged IP65-rated design and improved field-of-view temperature sensing for more accurate monitoring in home and office environments. This compact device measures temperature, humidity, light, and motion to provide comprehensive insight into indoor conditions. It delivers advanced presence detection for reliable desk occupancy and short-range activity monitoring, along with accelerometer and magnetic sensing for device and nearby object movement. A user- friendly twist-lock mount, easy battery access, and improved battery-life reporting make VIVID v2 a robust and adaptable solution for holistic environmental monitoring.
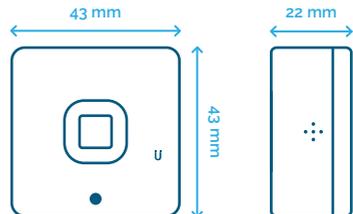
IP 65   4 + YEARS

Sensing Functions

AMBIENT TEMPERATURE

AMBIENT RELATIVE HUMIDITY

AMBIENT LIGHT

AMBIENT MCU TEMPERATURE

ACCELEROMETER

MAGNETIC HALL EFFECT SENSOR

MOVEMENT DETECTION VIA HALL EFFECT (DOORS, WINDOWS, DRAWERS)

PRESENCE DETECTION

BATTERY LEVEL INDICATOR

Features

✓ **4+ year battery life*** enabled by a low-power design for extended maintenance-free operation

✓ **Compatible with standard LoRaWAN® gateways and network servers** for broad interoperability

✓ **User-configurable parameters and thresholds** allow the device to be tailored to a wide range of monitoring applications

✓ Uses **TMOS** thermal infrared sensing to **detect stationary human presence** by measuring emitted body heat

✓ Optimized for **close-range, desk-level occupancy detection**

✓ Onboard accelerometer supporting **orientation, acceleration, vibration,** and **impact** event detection

✓ TEKTELIC **Kona Atlas™ support** for payload encoding and decoding

✓ TEKTELIC **Locus™ integration** for centralized device, data, and fleet management

✓ **Quick and easy device onboarding & data viewing** using TEKTELIC **LeapX™** mobile application

✓ **Rapid deployment** for scalable commercial and enterprise installations

✓ **Remaining battery life reported** in percentage

* Actual battery life varies based on configuration, data rate, and operating temperature.

43 mm

43 mm

22 mm

Technical and Functional System Specifications

General System Parameters

Operational Temperature	0°C to 60°C (10°C to 40°C optimal for battery life)
Storage Temperature	-30°C to 60°C (0°C to 30°C optimal for battery life)
Operational Relative Humidity	5% - 95% Non-Condensing
Ingress Protection	IP65
Size	43 x 43 x 22 mm
Weight (including batteries)	37.7 g
Battery	CR2477

Battery Life

Reporting Period = 60 min @SF7	4 years
Reporting Period = 60 min @SF10	3.5 years

Wireless Parameters (LoRa)

RF Power (Max)	13 dBm
RF Sensitivity	-137 dBm (SF12, 125 kHz)
Channel Plans	EU868, US915, AU915, AS923-1,-2,-3,-4, IN865, KR920
Antenna	Internal
LoRa Device Class	Class A & Class C*
Specification Version	1.0.4

Sensor Specifications	Range	Accuracy	Resolution
Ambient Temperature	0°C to 60°C	+/- 0.3°C	0.1°C
Ambient Relative Humidity	0% - 100%	+/- 4%	0.5%
	20% - 80%	+/- 2%	
Ambient Light	5-1000 lux	N/A	N/A
Accelerometer	Configurable Measurement Range: ±2 g, ±4 g, ±8 g, ±16 g	Zero-g Offset Accuracy: ±40 g	Configurable Mode-Dependent Resolution: 8-bit, 10-bit, 12-bit
Presence Detection Desk Mount	X Angle: 60° Y Angle: 60° Height: 0.75 m	N/A	N/A

Certifications & Compliance

Regulatory	FCC, ISED, CE (RED)
Product Safety	IEC 62368-1
Environmental	RoHS

Please note that class C will significantly lower battery life

TEKTELIC Communications is a premier supplier of complete LoRaWAN® IoT solutions. Our end-to-end systems combine network infrastructure, devices, and applications to enable easy, fast, and cost-effective deployment for the most demanding IoT challenges.