VIVID Smart Room Sensor PIR

LoRaWAN® connected Home and Office Environment Monitoring

TEKTELIC VIVID integrates practical functionality into a very small form factor. The VIVID is an ideal solution for holistically monitoring the home and office environment. The device is capable of measuring and reporting temperature, humidity, light, movement, motion, shock, detecting open / closed doors and windows. It also supports battery status updates for easy maintenance.

- Smart Home & Office
- Indoor Environment Monitoring
- Room Occupancy
- Facility Management
- Desk Occupancy
- Point of Entry Security
- HVAC Optimization

Features

» User Configurable Parameters and Thresholds

» Designed for Optimal Battery Life

» Multiple PIR Masking Options

» Long Battery Life

» Wall, Ceiling or Table Mount Configurations

» Simple Deployment

» Sleek and Unobstrusive Design

Applications

» Movement Detect (Doors, Windows, Drawers)

» G-Force Measurement (Settable Trigger)

» Motion Detection

» On / Off External Contact

» On / Off Internal Magnetic Switch

» Light Detection (On / Off)

» Temperature Measurement

» Humidity Measurement

42 mm

27 mm

42 mm

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Technical and Functional System Specifications

General System Parameters

Operational Temperature	0°C to 60°C (10°C to 40°C optimal)
Storage Temperature	-30°C to 60°C (0°C to 30°C optimal)
Relative Humidity-Operational	5% - 95% Non-Condensing (Operational)
Ingress Protection	IP30
Size	42 x 42 x 26 mm (enclosure)
	42 x 42 x 27 mm (with bracket)
Weight (including batteries)	25g
Battery	CR2477

Optimized Battery Life (Years) - CR2477

Transmission	SF 10 125 kHz	SF 7 125 kHz	SF 8 500 kHz
4 packets / hour	2.2	4.0	4.4
3 packets / hour	2.5	4.3	4.6
2 packets / hour	3.0	4.6	5.0
1 packets / hour	4.0	5.1	5.3
1 packets / day	5.5	5.5	5.6
Calculated under conditions			
Operational Temperature	20°C		
Tx Power	14 dBm		
Rx Cycle/Hour	1		

Wireless Parameters

RF Power	14 dBm
RF Sensitivity	up to -137dBm
LoRa Radio	SX1261
Supported ISM Bands	NA915, EU868, EU433, AU915, AS923
	CN470, CN779, IN865, KR920, RU864
Antenna	Internal
LoRa Device Class	A

PIR Detection Range (Wall Mount)

X Angle	70°
Y Angle	20°
Z Range	5 m

PIR Detection Range (Ceiling Mount)

X Angle	70°
Y Angle	84°
Height	3 m

* Assumes object in center of field of view

Sensor Capabilities

Motion Detection (PIR)
On/Off Magnet switch
Accelerometer
G-Force Measurement
On/Off External Contact
Light Detection
Temperature
Humidity

Regulatory Compliance

Safety	IEC 60950-1 (CE)
Regulatory	ETSI EN 300 220
	ETSI EN 301-489-1/-3
	FCC 15.247 FCC 15.209

Specifications subject to change without notice.