

TEKTELIC eDOCTOR

LoRaWAN® Device for Health & Respiratory Monitoring

The **TEKTELIC eDoctor** device is intended for bedside, mobile and central multi-parameter, physiologic patient monitoring of adult patients in professional healthcare facilities, such as hospitals, skilled nursing facilities, or their own home. It is intended for monitoring of patients by trained healthcare professionals. The TEKTELIC eDoctor Device is intended to be reused on single or multiple patients. It has been designed for prolonged use and is transit-operable, meaning it is intended to be worn on the body and is operable during movement.



Sensing Measurements



PULSE RATE



SKIN TEMPERATURE



RESPIRATION RATE



CHEST EXPANSION



BODY POSITION



ACTIVITY LEVEL

Features

- ✓ **Pending FDA 510(k) clearance as a medical device*** used by healthcare professionals to monitor patients wellbeing and recovery
- ✓ **Accelerometer-based motion + orientation detection** to track activity level and current posture
- ✓ **Intermittent monitoring of key physiological parameters** to ensure patient wellness
- ✓ **The eDoctor Mobile and Web Applications** support all TEKTELIC LoRaWAN Gateways
- ✓ **Optimized low-power design** results in typical battery life of 4 months without replacement
- ✓ **Quick and easy device onboarding & data viewing** using TEKTELIC eDoctor™ mobile application
- ✓ **Device can detect when not worn and saves power** for the next patient application
- ✓ **Battery status reporting** for visibility into remaining battery life and maintenance planning
- ✓ **Compact chest-worn form factor** designed for comfortable, discreet and non-intrusive wearing in clinical and home environments
- ✓ **Rapid deployment** for hospital and care facility installations
- ✓ **Chest band offered in two sizes** to support a wide range of body types

* Please consult the doctor for full information on the purchase and intended use. In North America, this product is available by doctor's prescription only.
** Actual battery life varies based on configuration, data rate, and operating temperature.



Technical and Functional System Specifications

General System Parameters			
Operational Temperature	5°C to 40°C		
Storage Temperature	-25°C to 70°C		
Operational Relative Humidity	15% to 90%		
Operational Atmospheric Pressure	700 hPa to 1060 hPa		
Ingress Protection	IP22		
Size	Sensor: 107.5mm x 40.9mm x 22.8mm		
	Strap Size (Small) Minimum: 603.2 x 1.7 x 30.0mm Maximum: 838.2 x 1.7 x 30.0mm		
	Strap Size (Large) Minimum: 844.5 x 1.7 x 30.0mm Maximum: 1320.8 x 1.7 x 30.0mm		
Weight (including battery)	Device: 68.0 g Small Strap: 25.3 g Large Strap: 33.3 g		
Battery	1 x Panasonic CR2477 (1000 mAh)		
Battery Life			
Reporting Period 5min at SF10 (24/7)	4.5 months		
Wireless Parameters (LoRa)			
RF Power (Max)	14 dBm		
RF Sensitivity	-137 dBm (SF12, 125 kHz)		
Channel Plans	US915		
Antenna	Internal		
LoRa Device Class	Class A		
Specification Version	1.0.4		
Specifications	Range	Accuracy	Resolution
Pulse Rate	30 to 200 bpm	+/- 3 bpm	1 bpm
Respiration Rate	4 to 80 rpm	+/- 2 rpm	1 rpm
Skin Temperature	30°C to 43°C	+/- 0.3°C	0.05°C
Activity Level	2.54g (Low, Medium, High)	N/A	0.01g
Body Position	0-90° (Horizontal/Vertical)	N/A	1°
Chest Expansion	0-12.7cm	N/A	0.05cm
Certifications & Compliance			
Regulatory	FCC, ISED, FDA 510(k) (PENDING)		
Product Safety	IEC 60601-1		

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.