

# Smart Badge 3



## Technical Specifications

# Smart Badge 3

Physical	Height	4.52 in (115 mm)
	Width	2.28 in (68 mm)
	Depth	0.25 in (6.5 mm)
	Weight	1.12 oz (32 grams)
	Casing IP rating (protection)	IP65 (water-resistant)
	Tamper-proof casing	No
	Flammability rating	UL V0 - anti-flammable Black
	IR front color	RED and BLUE - LED Indicators
	Visual status indicator	QR code, MAC address, and Unique ID (printed)
	Product Identifier	Two programmable buttons
	Buttons	Flat, low-profile buttons to minimize accidental presses
Environmental	Operating temperature	-40°F to +158°F (-40°C to +70°C)
	Storage temperature	Recommended: ≤+86°F (≤+30°C) Absolute min/max: -40°F to +158°F (-40°C to +70°C)
	Operating humidity	10%-95% RH (non-condensing)
	Storage humidity	5%-95% RH (non-condensing)
Battery Power	Battery life	Up to 4 years with IR and factory default settings
	Shelf life	2 years
	Number of batteries	1 cell
	Total capacity	800 mAh
	Replaceable	No
	Power activation	Button long press (5s) to turn ON Turning OFF disabled by default
Bluetooth Low Energy (LE)	Wireless standard	Bluetooth LE 5.4
	Range	Up to 230 feet (70 meters) in open space
	Frequency range	2.402GHz -2.480GHz
	Sensitivity	-96 dBm Bluetooth LE 1 Mbps
	Output power	-20 dBm to +4 dBm programmable levels
	Antenna gain	6.289 dBi
Sensors and Peripherals	IR (Infrared) sensor	IR photo-detector and preamplifier with advanced noise-suppression, enhanced sensitivity and wide angle view
	Ambient Temperature sensor	Temperature range: -40°F to 185°F (-40°C to 85°C) Accuracy at +25°C: ± 2.5°C
	Accelerometer	Ultra low-power high performance 3-axis accelerometer
	Button sensor	BLE-burst feature upon button press for guaranteed signal delivery
	Vibration motor*	Badge briefly vibrates when a button press event is successfully delivered to Kio Cloud
	*Planned for future release via firmware update.	

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### Certifications

CE, FCC, WEEE, Reach & RoHS,  
IC (ISED), UKCA

## Configurable parameters

### Bluetooth LE parameters

Parameter	Default value	Configurable
BLE packets	Kontakt.io Location	Kontakt.io Telemetry, Secure Profile, iBeacon, Eddystone
BLE interval	1000ms	Yes
BLE name	Kontakt	Yes
iBeacon major, minor, UUID	Random	Yes; custom request
TX power	-4 dBm	-20 to +4 dBm

### IR parameter

Setting	Default value	Configurable
IR listening interval	4s	Yes, Warning: Receiver's interval should be set to 1s or multiples of 2s to properly receive IR signal. Changing this setting will heavily impact device battery lifetime.

### Sensor / Buttons configuration

Setting	Default value	Configurable
Turn OFF device with long button press	OFF	Yes; ON/OFF
Button press	Single click Triple click - for Staff Safety	Yes; Single/Triple Click
Temperature	OFF	Yes; ON via Telemetry packet
Accelerometer raw data (x,y,z)	OFF	Yes; ON via Telemetry packet