

TrackLabel BLE Printable Asset Labels >

TrackLabel Bluetooth Low-Energy (BLE) Printable Asset Labels are thin, printable, easily activated and designed for real-time asset tracking. Disposable and ideal for item-level tracking applications, these stickers help ensure regulatory compliance, enhance supply chain visibility and maintain product integrity for temperature-sensitive and high-value asset shipments. TrackLabel BLE Printable Asset Labels are also cost-effective and simple to integrate.



ADVANTAGES AND FEATURES

Provides unobtrusive, low-profile and flexible asset tracking capability

The label features a thin battery that makes it flexible enough to wrap around device/package curvature.

Supports reliable connectivity at 100m or more

Active Bluetooth low-energy (BLE) wireless technology in the label integrates with existing BLE infrastructure, including gateways or phones, to enable long-range detection for asset tracking.

Simplifies end-user printing

The label is thin enough to pass through a standard label printer, making it easy to add customized graphics and logos.

Connectivity	Bluetooth low energy (BLE)
Range	100m (open range)
Label Dimensions	76 by 76 by 0.8mm
Frequencies	2.402 to 2.480 GHz
Bendability	38mm (1.5") radius (min.)
Operating Temperatures	-30 to +60°C

Offers seamless activation with optimized battery life

The label "wakes up" easily from sleep mode when removed from the liner, reducing power use while in storage and improving battery life during the period of active use.

Enables safe transportation and disposal after use

Sustainable battery chemistry is designed to be air shipment-compliant and allows for safe disposal in accordance with local regulations.

MARKETS AND APPLICATIONS

MedTech

- Authentication and anti-counterfeit systems
- Cold chain management technologies
- Emergency response systems
- Medical device and surgical instrument tracking systems
- Medical standards adherence systems
- Patient identification and monitoring devices
- Shelf-life monitoring systems
- Staff and inventory management systems



Cold Chain Management Technologies



Inventory Systems



Supply Chain Visibility Systems

Industrial Automation

- Asset management systems
- Cold chain monitoring technologies
- Condition monitoring systems
- Inventory and workforce management systems
- Process optimization technologies
- Quality control systems
- Shipment monitoring systems
- Supply chain and logistics

Automotive

- Anti-theft devices
- Finished-vehicle logistics systems
- Fleet management technologies
- Inventory systems
- Vehicle diagnostics systems

Telecommunications

- Asset management systems
- Environmental monitoring devices
- Real-time location services
- Security and access control systems

TrackLabel BLE Printable Asset Labels

PRELIMINARY SPECIFICATIONS

Reference Information

Packaging: Roll
Connectivity: BLE beacon
RoHS: Yes
REACH Compliant: Yes
Frequency Compliance: FCC, IC, CE
Protocol: BLE 5.3, 1Mbps
(payload-compatible with BLE 4.x)
BLE Channels: 37 (2.402 GHz), 38 (2.426 GHz),
39 (2.480 GHz)
Security and Privacy: AES-128 authentication
and encryption

Electrical

Power: 3V battery, 15% self-discharge per year
Read Range: 100m or more
Radio Frequency: 2.4 GHz ISM band, BLE 5.3,
up to +4 dBm
Electrostatic Discharge, Human Body Model:
±4500V, Class 3A (ESDA/JEDEC JS-001-2017)
Direction Finding: Constant tone extension (CTE)
in legacy advertising (BLE 4.x) packet

Mechanical

Label Dimensions: 76 by 76 by 0.8mm
(3.0 by 3.0 by 0.03")
Label Roll: 76mm (3.0") diameter core, 203mm (8.0")
outer diameter, 370 labels per roll
User Print: 51 by 76mm (2.0 by 3.0") print area,
ink-jet or thermal transfer
Bendability: 38mm (1.5") radius (min.)

Physical

Facestock: Polyethylene terephthalate (PET)
Mounting Adhesive: Acrylic PSA (standard)
Release Liner: Calendered Kraft (standard)
Weathering: ASTM G154, ASTM D4329, ASTM D4587,
ISO 4892 (target)
Humidity: 20 to 90% relative humidity
Shelf Life: 1 year
Operational Life: 6 months (standard)
Storage Temperatures: +5 to +25°C
Operating Temperatures: -30 to +60°C

www.molex.com