

2" x 4"

(49 mm x 102 mm x 0.5 mm)



Smart T-Labels from Reelables

Automated temperature monitoring at scale

Reelables T-Labels are temperature-tracking, active Bluetooth labels for monitoring perishable inventory and coldchain shipments. Their ultra-thin form factor and print-to-activate technology make them easy to integrate into existing inventory and warehouse labeling processes.

Unlike existing temperature loggers with cumbersome setup, Reelables T-Labels are a flexible, low-profile alternative designed for scale. The temperature-monitoring labels are activated at the time of printing, then capture ten-minute readings for up to three weeks, automatically uploading the temperature data to the cloud. Notifications and data reports are generated automatically, satisfying required temperature reporting without manual handling or scanning. Final-mile recipients can even download temperature data using Bluetooth on their mobile phones to confirm compliance during transport.

Deployment made simple

Ensuring an unbroken coldchain has never been easier. Reelables T-Labels can be applied at a per-piece level the inside or outside of product packaging or shipping cartons. They are supplied as reels of printable media for use off-the-shelf barcode printers, making them perfect for large-scale deployments wherever existing labeling is already taking place. The label also features a printed battery-on-circuit using a non-lithium chemistry that simplifies disposal and recycling considerations as well as aviation compliance.

The long wireless range of the T-Label enables flexible deployments along the cold supply chain. A single enterprise Bluetooth gateway from Reelables can often cover an entire warehouse, allowing for seamless visibility at more sites compared to traditional RFID installations requiring corridors, tunnels or manual scanning.

An integrated solution

Reelables T-Labels come fully integrated with a provisioning platform and telemetry solution. Get started right away without full-scale integration required. With Reelables, you get an out-of-the-box solution that includes a dashboard and mobile app. And when you're ready to integrate with your WMS or TMS systems, the Reelables cloud-based APIs make it possible.

Learn more about Reelables T-Labels at reelables.com/temperature

Features

- Pharma-grade temperature accuracy
- Wireless Bluetooth connectivity
- NFC retrievable backup
- Print to activate
- Non-Lithium battery (not dangerous goods)

Applications

- Perishables
- Pharmaceutical monitoring

Key Parameters

- ± 0.5 °C accuracy
- Active lifespan: 3 months
- Storage shelf life: 1 year
- Connectivity range: 25 m (82 ft)
- UHF, HF activation

Detailed specifications

	Thermal Transfer (TT)	Waterproof (WP)
Material Construction		
Facestock	Direct thermal paper	Polypropylene
Adhesive	Permanent acrylic	
Liner	120 gsm glassine	
Total thickness (±10%)	0.56 mm	0.66 mm
Environment	Indoor use (IP61)	Outdoor use (IP67)
Temperature Performance		
Minimum application temp.	8 °C (46 °F)	
Operating temp. range	-10 °C to 55 °C (14 °F to 132 °F)	
Recommended Printers and Ribbons		
Printers	Sato CLNX4, WWCLP180ZNAR	
Ribbons	N/A	PN4456
Adhesive Strength		
Corrugate	0.14 N·m (20 oz in)	
Polycarbonate	0.39 N·m (55 oz in)	
Polyethylene	0.24 N·m (34 oz in)	
Chemical Resistance		
Weak chemicals	Test in application	Resilient
Harsh chemicals	Not recommended	Test in application

Electrical Specification

- Bluetooth version 5.1
- Frequency 2.402 GHz to 2.480 GHz
- < 1 mW EIRP
- Beacon interval (active) 1 sec
- HF NFC 13.56 MHz
- Battery coating Zinc-Manganese
- No Lithium components

Environmental

- RoHS Directive 2011/65/EU
- (EU) 2015/863 Annex II

Regulatory

- FCC-ID 2A7TQRA0001
- FCC 15.249:2022
- CE, DO-160



- Airline approvals by request

Ordering Information

PN 10600T-

- TT Thermal transfer -05 Accuracy ± 0.5 °C
- WP Waterproof / IP67 -10 Accuracy ± 1°C

