

LocoTag T1B - Smart Cable Sensor.



Product Highlights.

- → Easy to install cable sensor
- → Designed in partnership with TydenBrook Security Products Group
- → Alerts users when the cable has been detached or cut
- → Up to 80m (262ft) range
- → IP65 waterproof
- → Logs connection status when out of hub range
- → Pairs with a System Loco Hub device using 2.4GHz
- → Required to be used with LocoTrack HGR4/HGD4

Installation and asset association.

The T1B is designed to work alongside existing cable seal tamper detection systems used in the haulage industry. The optical cable, supplied with the unit, follows the same path as the metal cable seal and is plugged into the T1B unit. To access the asset, both the metal cable seal and optical cable have to be cut, triggering a status update from the T1B device. A change of state before the asset has arrived at its destination can be used to raise an alert.

During installation an LED on the device indicates if the optical cable has been correctly connected and the tamper detection is now active. The device status can be monitored locally using an app on a BLE enabled device. Pairing of the T1B device with a communication hub can be done via the LocoAware UI, or by integration of the LocoAware API into a customer application.

How the system works.

The LocoTag T1B Cable Sensor reports through System Loco Hubs such as the HGD4 or HGR4; the devices are paired during device deployment. When activated, the cable sensor tag will report the status of the cable (attached, detached or cut). With the combination of the System Loco HGD4 or HGR4 communication hubs, the full location and status of a shipment can be monitored. Actionable alert notifications can be triggered to almost instantly signal to personnel that a container seal has been opened or compromised.

The LocoAware platform enable users to view logged data, location and temperature where the LocoTag T1B Cable Sensor has been observed by System Loco Hubs. The same data is available to third party monitoring applications and services via a JSON API.

Design considerations

The system has been developed in partnership with TydenBrooks Security Products Group, the global leader in security seals. With real-world experience and testing, the device is designed to be easy to configure, install, monitor and extend (with integrations).

The device is built with end-to-end security built into the hardware and protects against replay and masquerade attacks. Each LocoTag T1B Cable Sensor has a unique key programmed at manufacture and all communication is authenticated.

Applications Include.

All high value shipments including technology and pharmaceutical products. The device can be deployed with trailer door latches and hasps, intermodal containers and industrial valves.



Technical Specifications.

Communication

BLE 4 & 5 discoverable

Authenticated proprietary protocol over 2.4 GHz

Sensing Capabilities

TOSLINK Fibre Loop Sensor

LocoTag reporting

80m (262ft) outdoors Range

Power Consumption

Sleep	0.001mA (average)
Reporting	12mA (average)
Reporting of full log	12mA (average)

Battery

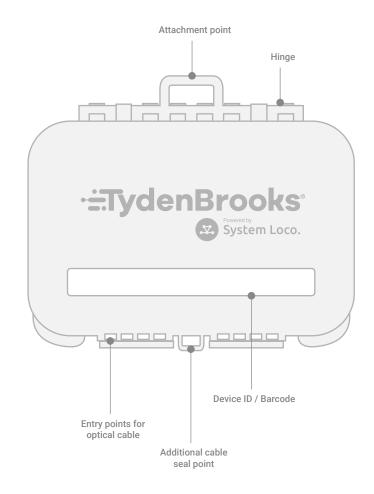
3V 500mAh primary battery CR2450 lithium non-rechargeable coin cell

Mechanical charecteristics

Dimensions (LxWxH)	121 x 101.09 x 25mm 4.76 x 3.97 x 0.98in
Weight	100g (3.5oz) (approx)
Material	PC & ABS (recyclable casing)
Color	Gray

Environmental

IP rating	65
Storage temperature	-30 to 85°C (-22 to 185°F)
Operating temperature	-25 to 65°C (-13 to 149°F)



Certifications

Expected: FCC, IC, CE, NOM, IFETEL

Works with

LTP-HGD4, LTR-HGR4, LTR-HFR4, LocoTrack Devices LTP-HGP4, LTP-HGC4

Part number

T1B