



eTimestrip TIR Temperature Recorders

- **Thin, small, durable, smart and cost-effective**
- **Quick implementation**
- **Can be used by 3rd parties**
- **100% calibrated and observes conformity to regulatory guidelines**
- **Stable monitoring along the entire supply chain**
- **Fully FDA GxP / 21 CFR Part 11 compliant**
- **LED indication, PDF download and mobile app versions**

eTimestrip TIR temperature recorders continuously monitor temperature and calculating remaining stability budget of pharmaceutical products or clinical studies along the entire supply chain.

They are thin and small enough to go on clinical kits and sales units and durable enough to stay on the pharmaceuticals throughout the monitoring time.

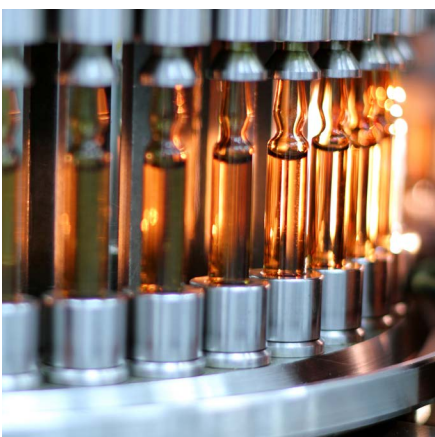
There are four eTimestrip TIR devices available. Use TC471 Freeze 0°C Descending and TC472 2°-8°C to manage deviations up to 6 alarm zones. The alarm status is always visible and can be extracted via compatible Android app. It is durable enough to stay on the product during its entire shelf life of up to 2 years.

Use TC489 for 2°-8°C shipments where a visual alarm status along with a downloadable PDF or Excel report via compatible Android app is required.

Use TC490 for or 2°-8°C shipments where a visual alarm status only is required.

The electronic indicators monitor temperature exposure and not the product quality. Its purpose is to indicate if product quality evaluation/testing is required.

Complies with the ISO standard 19005-1 Document Management for the long-term preservation of electronic documents (PDF/A).



eTimestrip Range

eTimestrip TIR TC471 0°C



- For frozen transports
- LED indicator
- Single use
- Measuring range -30°C to 70°C
- Scan eTimestrip TIR lights to generate PDF reports via the Timestrip Android mobile app



eTimestrip TIR TC472 2-8°C



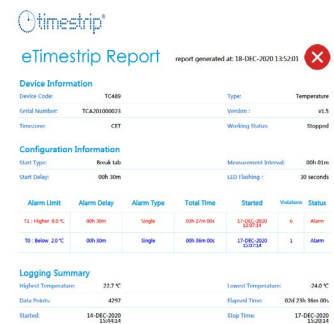
- For pharma shipments 2°C-8°C
- LED indicator
- Single use
- Measuring range -30 °C to 70 °C
- Scan eTimestrip TIR lights to generate PDF reports via the Timestrip Android mobile app



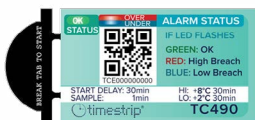
eTimestrip TIR TC489 2-8°C



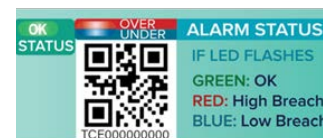
- For 2°C-8°C shipments
- LED indicator
- NFC indicator with Android App
- Measuring range -30°C to 60°C
- Single use
- Flashing LED lights show the shipment status
- Read with an NFC enabled smartphone via our app.
- Export data from the app to PDF or Excel for evidence of temperature breaches



eTimestrip TIR TC490 2-8°C



- For 2°C-8°C shipments
- LED indicator
- Measuring range -10°C to 50°C
- Single use
- Flashing LED lights show the shipment status, OK or ALARM status light blinks



Specifications



eTimestrip TC471 No Freeze 0°C



eTimestrip TC472 2-8°C

Type	PDF report temperature indicator with multiple LED alarm levels
Recording options	Single use
Activation Feature	Start by breaking tab
Indication	Ready, Operating, Stopped, EOL, OK, ALARM, Configuration profile identification
Operating Range	-30°C to +70°C
Measurement Accuracy	±0.5 °C in the core range of -10 °C to +50 °C. Typical accuracy (95 % of all indicators) ±0.4 °C
Accuracy outside core temperature range	±1.0°C from -30.0°C to -10.1°C as well as +50.1°C to +70.0°C
Measurement Interval	1 minute
Resolution	0.1°
Case, Dimension, Weight	Metal housing 26 × 28 × 2.8 mm (1.0 × 1.1 × 0.1 inch) 4.5 g (0.16 oz)
Battery Life	Started indicator runs for 18 months. Use in frozen applications can limit the battery
Battery Type	Button cell contained in equipment, UN3091, exempt from DGR declaration
Start Delay	30 mins, then device active
Shelf Life	2 years
Certificates	Ilac / NIST / ISO 17025 traceable production calibration certificate
Display alarm status	Shown by LED (no display)
Report	PDF file generation via Smartphone app automatically establishes an evaluation report with embedded changing protected raw data. Complies with the ISO standard 19005-1:2005 Document Management for the long-term preservation of electronic documents (PDF/A). – Statistics (min/max, alarm) and detailed indicator information (ID, configuration, etc.)
Certifications	CE EN12830 WEEE RoHS RTCA DO-160 (EMC) UN 38.3 Safe Transport of Chemical Goods Indicator configuration and Indicators with ELPRO defined standard configuration and label. Customer-specific configuration and additional analysis software hardware options for larger quantities. Wireless read-out of statistics possible with Smartphone app.

Specifications



eTimestrip TC489 2-8°C



eTimestrip TC490 2-8°C

Type	PDF report temperature indicator with multiple LED alarm levels	Display Alarm Status shown by LED
Recording options	Single use	Single use
Activation Feature	Break square tab to activate, triangle tab to stop	Break tab activation
Operating Range	-30°C to 60°C	-10°C to +50°C
Measurement Accuracy	± 0.5 °C (-20°C~40°C), ± 1 °C (others)	±0.5°C (-10°C to 40°C)
Measurement Sampling	1 minute	1 minute
Sensor	Build in NTC	
Case, Dimension, Weight	Rigid plastic, 34mm x 48mm x 4.5mm, 6g	Rigid plastic, 77mm x 46mm x 12mm (3.0 x 1.8 x 0.5 inches), 10 g
Battery Life	1 year	180 days (measurement interval 1 minute during 2°C~8°C environment)
Battery Type	Button cell CR1620 lithium	Button cell CR2032 lithium
Shelf Life	24 months	24 months
Start Delay	30 mins, then device active	30 mins then device active
Alarm Delay	Temperature above 8°C for 30+ minutes Temperature below 2°C for 30+ minutes	Temperature above 8°C for 30+ minutes Temperature below 2°C for 30+ minutes
Calibration points	-20°C, +2°C, +8°C, 20°C, +40°C, 60°C	
Waterproof grade	IP54	IP67