

BTSMPI EN12830

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EN12830

EN12830 is a European standard specifying the requirements and test methods for temperature recording devices used in the storage, transport, and distribution of chilled, frozen, deep-frozen, and quick-frozen food and other types of products. It ensures these devices meet specific accuracy, resolution, and response time criteria to maintain product safety and quality.

EYE SENSOR EN12830

EYE Sensor EN12830 is a Bluetooth® Low Energy recorder that enhances business operations through certified temperature monitoring. This sensor holds an EN12830 certificate and delivers precise measurements with a 0.5°C accuracy class across all working ranges from -20°C to +60°C. Each temperature sensor is calibrated in an ISO 17025-certified laboratory to ensure reliability. Designed with a food-grade casing that complies with EU and FDA regulations for food contact applications, the EYE Sensor EN12830 is perfect for tracking perishables like dairy, meat, and pharmaceuticals. It also features internal memory capable of storing temperature readings for up to 345 days, ensuring compliant monitoring.

Benefits of EN12830 Compliance

By adhering to the EN12830 standard, companies can ensure that their temperature recording devices are reliable and accurate, thereby maintaining the integrity of the cold chain and safeguarding the quality and safety of temperature-sensitive products. Main values:

Ensures Food Safety: By maintaining correct temperature conditions, the standard helps prevent the growth of harmful microorganisms and ensures the safety of food products.

Quality Assurance: Helps in maintaining the quality and shelf life of temperature-sensitive products.

Regulatory Compliance: Ensures that companies meet legal requirements, avoiding penalties and legal issues.

Traceability: Provides reliable data for tracking and auditing the temperature history of products.

Technical specification

Resolution (°C)	Class (°C)	Response time	Sensor temperature range	Calibration temperatures
0,01	0,5	13 min	from -20 °C to +60 °C	-30°C, 5°C, and 70°C

Resolution (°C) - Maximum resolution of change in temperature that the device can display.

Class (°C) - Specifies the maximum accuracy deviation of the temperature recording devices.

Response time - The response time of a temperature sensor is the time it takes for the sensor to reach 90% of a step change in temperature. Typically, the maximum response time for air temperature sensors should be no more than 15 minutes. This ensures that the sensor can quickly detect changes in the air temperature, which is crucial for maintaining the correct storage or transport conditions.

Sensor temperature range - Indicates operational temperature

Calibration temperatures - The EYE SENSOR with EN12830 certification uses a sensor that has been factory calibrated in an ISO/IEC 17025 accredited laboratory. The temperatures listed in the table indicate the specific conditions at which the sensor was tested and calibrated.

Common temperatures to observe

The definition of the temperature values that you must respect depends on your sector of activity. To help you, if you are in the case of transport of perishable foodstuffs, the storage temperatures to be respected for various types of products:

Category	Product Type	Common Temperature Range	Examples
Food and Beverages	Fresh Produce	0°C to 10°C (32°F to 50°F)	Fruits, vegetables
	Dairy Products	1°C to 4°C (34°F to 39°F)	Milk, cheese, yogurt
	Meat and Poultry	0°C to 4°C (32°F to 39°F)	Fresh meat, poultry
	Frozen Foods	-18°C to -20°C (-0.4°F to -4°F)	Frozen vegetables, meats, ice cream
	Chilled Beverages	2°C to 10°C (36°F to 50°F)	Soft drinks, beer
Pharmaceuticals and Medical	Refrigerated Pharmaceuticals	2°C to 8°C (36°F to 46°F)	Vaccines, insulin
	Frozen Pharmaceuticals	-20°C to -10°C (-4°F to 14°F)	Certain biological samples, specific medications
	Controlled Room Temperature (CRT) Pharmaceuticals	15°C to 25°C (59°F to 77°F)	Most oral medications, over-the-counter drugs

Chemicals and Industrial	General Chemicals	15°C to 25°C (59°F to 77°F)	Solvents, reagents
	Temperature-Sensitive Chemicals	2°C to 8°C (36°F to 46°F) or below	Certain catalysts, lab reagents
Electronics	Electronic Components	15°C to 25°C (59°F to 77°F)	Circuit boards, semiconductors
	Temperature-Sensitive Electronics	Varies, often lower temperatures	Some battery types, high-precision instruments
Other Products	Cosmetics	15°C to 25°C (59°F to 77°F)	Creams, lotions, makeup
	Artwork and Archival Materials	18°C to 22°C (64°F to 72°F) with controlled humidity	Paintings, manuscripts

Attachments

Certificate of Type Conformity to the standards NF EN 12830 (August 2018)



You can the find PDF version of the EN12830 Certification [here](#).