



Product Data Sheet

Defender Temperature Sensor

Cellular LoRaWAN® Solution

Help protect your property and equipment with smart temperature monitoring

The Defender Temperature Sensor, part of the Meshify Defender™ sensor solution suite, detects abnormal temperature changes and humidity conditions that can cause property, equipment or system damage, spoilage, and more.

The Defender Temperature Sensor communicates with the Gateway using LoRaWAN protocol providing you wireless connectivity over long distances without the need for Wi-Fi.

Key Features:

- Wireless, battery-powered LoRaWAN temperature sensor
- Monitors for temperature and humidity levels
- IP45 (ingress protection) rated for protection against dust and low-pressure water jets
- Easy activation and alert monitoring via the Meshify Protect™ app
- Optional temperature probe, leak probe, and leak rope attachments



meshify defender™

Meshify's next generation LoRaWAN sensor supports a variety of property and equipment monitoring applications with long range and extended battery life.



meshify protect™

Proprietary mobile app for activating Meshify sensors and monitoring locations, even when no one is there. Available for iOS and Android.

For more information, contact:

HSB Sensor Solutions
Email: IoTSales@hsb.com
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Technical and Functional System Specifications

Mechanical	Dimensions	3.41" x 1.3" (8.67 cm x 3.3 cm)
	Sensor Weight	Without Batteries: 3.28 oz (93 g) With Batteries: 4.34 oz (123 g)
	Mounting Bracket Weight	0.42 oz (12 g)
	Operating Temperature	-40°F to +176°F (-40°C to +80°C)
	Operating Humidity Range	<80% Constant Humidity
	Case Material	White PC-ABS
	IP Rating	IP45
Physical Interface/Connections	Device Interface/Connector(s)	3.5 mm Female Jack for Optional Sensor Attachments
Power Requirements	Internal Battery	2 x Lithium AA 1.5v Batteries (Replaceable)
	Temperature Accuracy	-4°F to 176°F, ± 1.8°F (20°C to +80°C, ± 0.2°C)
	Humidity	0, +90; Absolute Accuracy ± 2% RH
Sensors	Accelerometer	3-Axis, Motion, Vibration, Shock
	Optional Attachments (via Female Jack)	Temperature Probe Leak Rope Leak Probe
	RF Frequency	915MHz
LoRa Connectivity & Certifications	Wireless Range	Indoors: Max 350 ft (106.7 m) Outdoors: Max 1,000 ft (304.8 m)
	Regulatory	FCC, IC, LoRa Alliance®

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

CAUTION: The grantee is not responsible for any changes or modifications not expressly approved by the party responsible for compliance. Such modifications could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy, and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This equipment complies with the FCC RF radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20cm between the radiator and any part of your body.