



# CS8300 Temperature Sensor Tag



## Product Features

**Cold Chain temperature monitoring** at the carton and item level.

**Consistent and reliable read performance** when being placed on products with high water content under low temperature.

**Programmable temperature thresholds** and sampling rates, ranging from -24C to 64°C at 0.25°C resolution.

**Compliant with EPC Gen 2 readers** and can be used for product identification.

The high costs of existing temperature logging tags make deployment down to the carton-level economically difficult. The CS8300 provides a low-cost solution for cold chain monitoring applications that will enable affordable options for users. In addition, the CS8300 slim profile and light weight is beneficial for cold chain tracking at the carton and item level. The CS8300 gives longer read range, longer battery life, and lower unit cost than other RFID temperature tracking tags. Moreover, CS8300 is fully EPC Class 3 Gen 2 compliant and can be read by any Gen 2 compliant reader.

## Applications

Cold Chain Management  
Temperature Data Logging  
Food Inspections  
Cold Storage Rooms  
Product Authentication

Quality Control  
Recall Management  
Cold Chain Transportation  
Temperature Controlled  
Pharmaceuticals

Living Organic Materials  
Floral Management  
Industrial Composites  
and Chemicals Tracking

<b>Dimensions</b>	85 x 54 x 1.8 mm (3.34 x 2.12 x 0.08 in)
<b>Memory</b>	352bit EPC, 48bit UID, 3072bit User Memory
<b>Operating Temperature</b>	-24°C to 64°C (-11°F to 147°F)
<b>Temperature Accuracy</b>	+/- 0.5°C
<b>Temperature Resolution</b>	0.25°C
<b>Mode of Operation</b>	Battery-Assisted Passive (BAP) EPC Class 3 Gen 2
<b>Operating Frequency</b>	860 to 960 MHz
<b>Battery Type</b>	Lithium battery
<b>Battery Life</b>	Based on options and usage scenarios
<b>Sampling Interval</b>	User configurable between 1 second to 2.5 days
<b>Alarm</b>	Under Temperature, Over Temperature, Low Battery
<b>Data Retention</b>	> 10 years @ 55°C
<b>IP Rating</b>	IP 68
<b>Country Version</b>	CS8300-1, optimized for 866 to 868 MHz CS8300-2, optimized for 902 to 928 MHz

