CSL CONVERGENCE SYSTEMS LIMITED

CS8300 Temperature Sensor Tag

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.
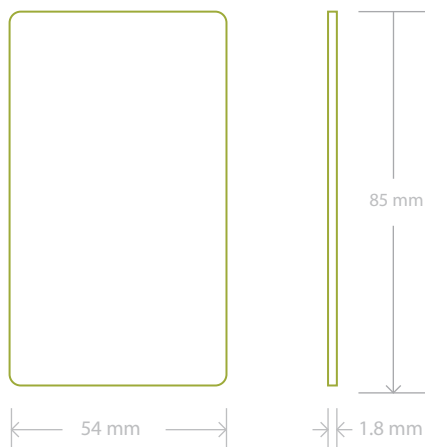
Product Features

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.

Applications

Cold Chain Management	Quality Control	Living Organic Materials
Temperature Data Logging	Recall Management	Floral Management
Food Inspections	Cold Chain Transportation	Industrial Composites and Chemicals Tracking
Cold Storage Rooms	Temperature Controlled Pharmaceuticals	
Product Authentication		

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

85 mm

54 mm   1.8 mm