

A927ZET

Rugged RAIN RFID Temperature Logger Tag with External Probe



Features

- RAIN RFID (UHF EPC Class1 Gen2, ISO 18000-63) interface
- High temperature and time accuracy
- Fast samples download
- Configurable alarms
- Configurable sampling interval
- Long monitoring time span

Applications

- Fresh food
- Seafood
- Meat and poultry
- Milk based products
- Frozen food
- Pharmaceuticals
- Special chemical products
- Clinical trials

Overview

CAEN RFID easy2log® **A927ZET** is a low cost, ruggedized, semipassive RAIN RFID logger tag that allows to monitor temperature sensitive products like perishable foods and pharmaceuticals, during transportation and storage. The combination of the high resolution sensor, the large memory size and the standard RFID interface permits to realize effective track and trace solutions for the cold-chain.

The **A927ZET** can be used with standard RAIN RFID readers available on the market without requiring any additional equipment thanks to its compatibility with the EPCglobal C1G2 and ISO18000-63 standards.

The tag can be configured to store temperature samples in intervals from 8 second to 18 hours in the internal memory that can contain up to 4,096 samples per sensor. For each sensor the user can define alarms for high and low temperature thresholds for an accurate control of the temperature excursions.

The rugged enclosure of this logger make it the perfect choice for the cold-chain monitoring in harsh environment or in presence of strong vibration while the external sensor probe allows to monitor the internal and the external temperature of a box.

The **A927ZET** RFID logger can be used for multiple shipments thanks to the long battery life and the reset function thus allowing to reduce the total cost of the solution and anticipate the ROI.



Technical Specification Table

Frequency Range	860÷928 MHz
Tag Type	Semipassive
RFID Interface	EPC Class 1 Gen 2 - ISO18000-63
Data Points	Up to 4,096 samples per sensor
Temperature Operating Range	-20 °C to +70 °C
Temperature Accuracy	±0.5 °C typical
Monitoring Time Span	Up to 5 years
Time Accuracy	<0.01% error
Read Range	- Up to 10 mt. in free air @ 2W ERP - Up to 2.5 mt. on metal @ 2W ERP
Available Memory	- 512 bits in EPC memory bank - 17484 bytes in User memory bank - 208 bits in TID memory bank - 512 bits in Reserved memory bank
Alarms	Multiple configurable high and low temperature thresholds
Operating Temperature	- -30 °C to +70 °C (internal sensor) - -20 °C to +70 °C (external sensor)
Storage Temperature	- -40 °C to +85 °C (internal sensor) - -40 °C to +85 °C (external sensor)
Absolute Temperature Range	- -40 °C to +70 °C (internal sensor) - -20 °C to +70 °C (external sensor)
Temperature Resolution	±0.1 °C
Battery Life	3 year typical (dependig on usage and operting temperature)
Battery Type	Li/MnO2 Model Renata CR2450N
IP rating	IP67
Dimensions (external probe excluded)	- (W)130.4 x (L)23.4 x (H)12.7 mm ³ max. - 5.133 x 9.21 x 5.00 inches ³
Weight	48 g.

Ordering Options

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