

A927Z - RT0005

RFID Temperature Loggers

easy2log



A927Z



RT0005

Features

- Long monitoring time span: more than 5 years
- High temperature accuracy: $\pm 0.1^\circ\text{C}$ typical
- Fine grained sampling time: less than 10 sec. minimum
- UHF EPC Class1 Gen2/ISO 18000-6C RFID interface
- Fast download: 1,000 samples in less than 4 seconds
- Complete set of full configurable shelf life prediction methods:
 - temperature trend histogram,
 - Mean Kinetic Temperature (MKT) calculation,
 - Arrhenius based shelf life prediction algorithm,
 - multiple temperature thresholds

Applications

- Fresh food (fruit, vegetables)
- Seafood
- Meat and poultry
- Milk-based products
- Frozen food
- Chemical/pharmaceutical products

General Info

The **easy2log** products family is the ideal portfolio of RFID enabled loggers for temperature-sensitive products that may be damaged when exposed to improper temperature ranges during shipment and storage. Especially indicated for food and pharmaceuticals, the **easy2log** RFID loggers are well suited also for chemicals and special industrial products.

easy2log products enable a new era of Cold Chain Management Solutions. Track & Trace solutions based on EPCGlobal UHF RFID standards can be combined with environmental monitoring and shelf life prediction capabilities. **easy2log** tags can be read and configured using a standard EPCGlobal compliant RFID reader without the needs of special commands or devices.

Pharmaceutical and food industry can use this data to calculate when to replenish perishables and how much product to put on shelves. The benefits of applying RFID and sensors to perishable goods include improved food and drugs safety, longer vaccines and drug efficacy, more efficient product recalls, reduced costs due to less spoilage, lower inventories, more efficient logistics and improved customer service.

easy2log products allow both passive and active risk management for continuous improvement of the quality process. The product can be easily checked at any time in order to accept/reject the shipment, the analysis of the temperature vs. time data allows active risk-management: the critical points of the cold chain can be identified and countermeasures can be put in place to avoid further failures (continuous improvement).



Technical Specifications Table	Easy2Log - A927Z	Easy2Log - RT0005
Data Points	8,000	4,000
Operating Range	-20°C to +70°C (normal range) -40°C to +85°C (extended range)	-20°C to +70°C
Temperature Accuracy	±0.1°C typical, ±0.75°C maximum	
Monitoring Time Span	Up to 5 years	
Time Accuracy	<0.01% error	
Monitoring Delay Option	N.A.	Up to 18 hours
RFID Interface	UHF EPC Class1 Gen2/ISO 18000-6C compatible	
Alarms	User-configurable high temperature and low temperature alarms	Multiple user-configurable high temperature and low temperature alarms, ETA alarm, MKT alarm, shelf life alarm
Available Memory	Up to 512 bits in EPC bank, up to 512 bits in User Memory bank	
Shelf Life Prediction	N.A.	Calculations based on Arrhenius kinetic model with customer designation of time-temperature dependency
Shelf Life Monitoring	N.A.	Provides Remaining Shelf Life information at check points with RFID reader or manual interface
Size	135x23x11 mm ³	107x107x6.6 mm ³
Weight	35g	24g
Water Resistance	IP67	IP67
Battery Life	Up to 3 years normal version Up to 5 years extended version	Up to 1 year

Calibration of **easy2log** tags is traceable to National Standards, which realize the physical units of measurements according to the International system of Units (SI).

Refurbishment Service available.



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