



Answering “Is it Fresh?”

How well has the quality of this perishable been maintained?”

Finding out is what Infratab Freshtime™ tags, labels and software do. The benefits? They give perishable producers and retailers insights about quality in the cold chain—about what happened, when and by whom.

We at Infratab call this—“product integrity” monitoring. And we believe it brings a whole new meaning to “freshness”.

About a Perishable’s Shelf Life

Perishables each have a unique spoilage rate (shelf life). Perishable producers know this and use shelf life to determine the expiration date on perishables.



Perishables each have a unique shelf life

Both quality and safety of a perishable are affected by physical, chemical and/or biological factors (often inter-related). Temperature is the predominant factor in determining how long acceptable quality lasts.

The management of the cold chain for perishables is never perfect—resulting in unplanned variations in temperature, especially in loading, unloading, transport and storage. When temperature spikes occur, unanswered is how much shelf life was lost due to these spikes—leaving brand owners unaware that the perishable does not meet quality standards and leaving resolution of invoice and insurance disputes to accounting and customer service personnel.

Freshtime™ Tags and Labels

Freshtime™ tags and labels actively monitor the perishable to which they are attached. They can be attached directly to a perishable, for example a large fish, or attached to cases, reusable transport items or pallets. This contrasts to temperature loggers used to monitor environments within the cold chain.

Freshtime™ tags are battery powered. They can be either 1-use or multi-use. Life of the tag depends upon the mAh of the battery

Freshtime tags are UHF RFID tags, either EPC Class 1 Gen2 or ISO 18000-6B compatible. Freshtime™ tags are “semi-passive” tags. This means that temperature sensing and shelf life calculations are battery-powered but RFID communications are powered by an RFID reader.

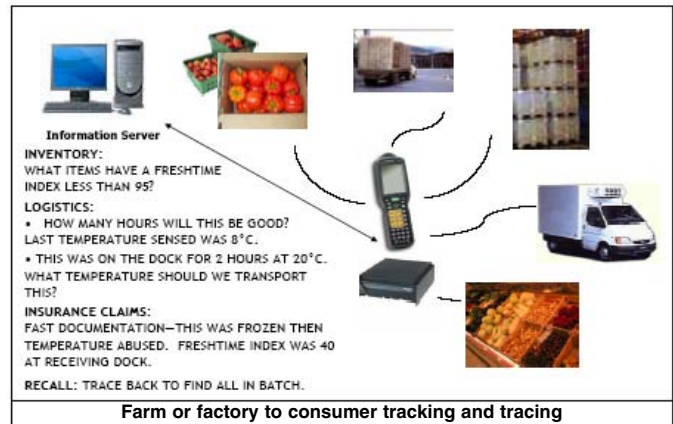
Industry standard RFID readers, handheld or fixed, load data about a perishable into the tag, query the tag about the perishable’s condition or freshness and retrieve history data about what happened during the cold chain.

A display is optional—permitting use in the field with no RFID infrastructure required.

Freshtime™ Tracking & Tracing

Infratab’s Freshtime™ software on the handheld or at the fixed reader captures, filters, and stores data read at different points in the cold chain—using either GPRS, wireless or connected LAN to communicate in seconds to those concerned about where the perishable is, when it arrived and most importantly “how is it?”.

The benefits: reduced shipped waste, reduced retailer waste, faster acceptance, fewer invoice disputes, faster processing of insurance claims—all which mean less of your time and money. But most importantly, Freshtime™ tags and software give you insight into and the ability to monitor, budget and manage a perishable’s condition. The benefits here are fresher products at the point of sale. And of course, increased sales.





Freshtime™ Label Specifications

SHIP FROM : XYZ Frozen Foods 380 Heuneme Road Santa Ynez, CA 93458		SHIP TO : Value Markets 72 Main Street Beltsville, MD 21741 Tel: 410 45458	
		CARRIER : TWAY 853930 2895769860	
FROM JUICY FOODS 2032 Ranch Road Santa Ynez, CA 93002 1 800 736-6565	TO DOUBLE A BRAND 84000 Westmont Court Beltsville, MD 20814 1 800 776-1412		
Blueberries			
		NUMBER AB	
		Press to check	
RFID Tag ID: 			

Freshtime™ UHF Labels

Label size (UHF): 4" x 6"; 4" x 4", 6" x 4"
Label life: 1 day to 3 years, depending upon battery

Temperature Sensing

Operating range: -25°C to +70°C

Sensor accuracy:

± 1.0°C: -25°C to -20°C

± 0.5°C: -20°C to +50°C

± 1.0°C: +50°C to +70°C

Sensor resolution: 0.1°

Sensor interval: user defined

Shelf Life

Shelf life data: linear, exponential or "other"

Monitoring

Alerts and history

RFID

UHF EPC Class1 Gen2 & ISO 18000-6B



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