

## SPECIFICATIONS

**Product Code** MP-OE-N-8-L (Multi Trip External Sensor)  
MP-ST-N-8-L (Single Trip External Sensor)

**Range of measurement** (-100 °C to +40 °C) -148 °F to +104 °F

**LCD Operating Range** (-20 °C to +70 °C) -4 °F to +158 °F

**Sensors** External sensor only

**Accuracy**

Celsius	from -100 °C to -80 °C	±1.0 °C
	from -80 °C to -10 °C	±0.7 °C
	from -10 °C to +40 °C	±0.6 °C
Fahrenheit	from -148 °F to -112 °F	±1.8 °F
	from -112 °F to +14 °F	±1.3 °F
	from +14 °F to +104 °F	±1.0 °F

**Resolution** 0.1°C or 0.1 °F

**Sensor response time** External Sensor – T90 of 5 minutes in moving air

**Memory Options** 8032 readings

**Software** ESCORT Console

**Sampling Frequency** 5 seconds – 18hours

**Time and date** Real time clock accurate to 1 minute per month

**Security** Password protected (programmable using  
Escort Console Software)

**Power Source** User replaceable lithium battery 3V coin cell

**IP Rating** IP64 (with DB9 cap on)

**Size** 83 x 57 x 17mm  
(excluding lug and external sensor)

**Weight** 70 grams (including battery)

**Case Material** Polycarbonate/ABS

**Storage Temperature** -40°C to +70°C (-40°F to 158°F)

**Typical battery life** 1-2 years operating  
(depending on usage)

**Buttons** Start & Stop button

**Warranty** 24 months, excluding battery



Screenshot example of  
Lowest Reading



Screenshot example of  
Highest Reading

## Installation

For temperature measurement of dry ice shipments we supply the iMiniPlus Dry Ice Logger with a Teflon cable to the external sensor protected by a stainless steel probe. The external probe is immersed in the dry ice next to the product for the most accurate temperature reading. The data logger should not come into direct contact with the dry ice. The thermal shock given by direct contact followed by subsequent removal can cause the logger temperature stress and malfunction due to solder fractures, electronic component and battery failure. We recommend that the logger be protected by placing a thermal blanket over the dry ice with the logger placed on top of the blanket for protection. The Teflon cable will withstand dry ice temperatures. Your dry ice box supplier should be an appropriate source for the thermal blanket.

## APPLICATIONS

ISO 9001  
BUREAU VERITAS  
Certification



Many high value life science products need to be transported in dry ice to ensure the efficiency of the product. If the dry ice does not maintain the critical temperature in the region of -80 deg C, these high value products will not be suitable for use. Typical products for dry ice shipments are principally associated with life science products, many of which are listed below.

**Medical samples**

**Biological products**

**Ingredient medical samples**

**Plasma**

**Animal and human tissue**

**Serums**

**Ingredients**

**Enzymes**

**Pharmaceutical products**

**Clinical trials**

**Diagnostic specimens**

**Blood products**

**Organs**

Spoilage of these products due to inadequate temperature management is extremely expensive and a risk to public health. Escort Data Logging Systems has developed the iMini Plus Dry Ice Temperature Data Logger with an external sensor to provide accurate temperature recordings of dry ice shipments. This logger provides assurance and security to such applications where temperature is a truly critical factor. With easy to use functions, high resolution and accuracy the Dry Ice logger is a small investment to ensure these high value products have been shipped under the correct temperature conditions and reassure you of the safety of the product for distribution. This protects your reputation, aids in settling insurance claims in the event of transport malfunctions, and contributes to the health and safety of those who require life science products.

