DataSheet

Tinytag Dry Shipper CR-0100

Cryogenic temperature data logger with integrated PT1000 probe

- Ultra-low temperature data logger
- -196°C nitrogen dry vapour applications
- 252mm probe length
- Digital display
- Visual alarm warnings during transit

Tinytag Dry Shipper is a standalone, ultra-low temperature data logger with an integrated PT1000 probe - for use in cryogenic vessels.

Data loggers are an essential tool for monitoring the temperature of clinical samples in transit in nitrogen dry vapour flasks. The Tinytag Dry Shipper data logger is designed to monitor and record temperatures of gametes, embryos and stem cells being transported in the shipper to -196°C.

Housed in a splashproof IP65 case, the unit can be mounted to the flask's lid with the probe inserted through an insulating plug into the tank.

It has a digital display of current readings and user programmable alarms that will trigger visual warnings when limits have been exceeded during transit.

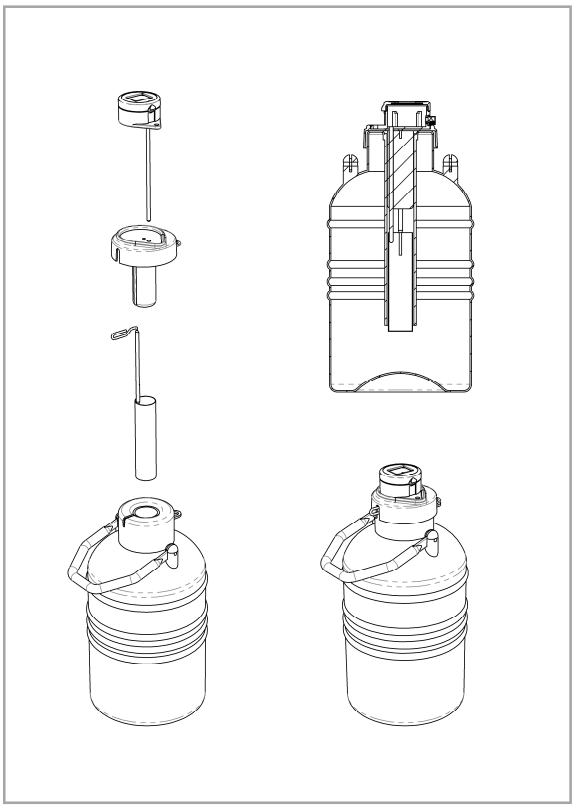
The logger uses Tinytag Explorer software for easy download, display and management of data. Information can be displayed in a graph or as a table of readings, and exported for use in third party programs such as MS Excel.

Tinytag

DataSheet

Tinytag Dry Shipper
CR-0100

Specification

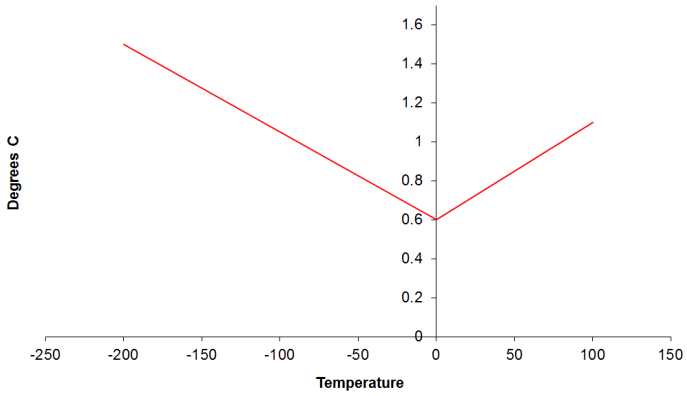


Features

Total Reading Capacity	32,000 readings
Memory type	Non Volatile
Display	4 digits + indicators
Display Modes	°C or °F
Display Refresh Rate	Every 2 seconds
Delayed Start	Relative / Absolute (up to 45 days)
Stop Options	When full After n Readings Never (overwrite oldest data)
Reading Types	Actual, Min, Max
Logging Interval	1 min to 10 days
Offload	While stopped or when logging in minutes mode
Alarms	2 fully programmable; latchable

Reading Specification

Reading Range	-200°C to +100°C (-328°F to 212°F)
Sensor Type	PT1000 (Class B)
Logger Resolution	0.01°C or better
Display Resolution	0.1°C or 0.1°F (1°C/°F below –99.9°C/°F)
Temperature Stability	0.005°C/°C Change from 25°C



Gemini DATA LOGGERS

Tinytag

DataSheet

Tinytag Dry Shipper
CR-0100

Physical Specification

IP Rating	IP65 splash proof (see notes)
Operational Range*	-20°C to +70°C (-13°F to +158°F)
Logger Case Dimensions	
Diameter	60mm / 3.36"
Height	88mm / 3.46"
Width	65mm / 2.56"
Depth (excl. probe)	35mm / 1.38"
Probe	
Length**	252mm / 9.92"
Diameter	3mm / 0.12"
Weight	95g / 3.35oz (typical)

*The Operational Range indicates the physical limits to which the logger itself can be exposed, the tip of the probe is rated to –200°C (-328°F).

**The length of the probe is taken from the base of the logger to the tip of the probe. A 2mm thick gasket is supplied with the logger that can be fitted to act as a cushion between the logger and the lid of the dry-shipper.

Notes

The battery fitted in this product is a single cell containing less that 1g of lithium and meets the requirements of the UN Manual of Tests and Criteria, Part III, Subsection 38.3.

Recommended Battery Types SAFT LS14250, Tekcell SBAA02P or Eve ER14250

The logger will operate with other ½AA 3.6V Lithium batteries but performance cannot be guaranteed.

Replacement Interval Annually

Before replacing the battery the data logger must be stopped. After removing an old battery from a logger, wait five minutes before inserting a new one. Data stored on the logger will be retained after a battery is replaced.

The clarity of the display may change in extremes of temperature.

If used at low temperatures the data logger should be allowed to warm to room temperature before it is opened to avoid condensation forming inside the unit.

Calibration

This logger is configured to meet Gemini's quoted accuracy specification during its manufacture.

We recommend that the calibration of this unit should be checked annually against a calibrated meter.

A certificate of calibration can be supplied for an additional charge either at the point of purchase, or if the unit is returned for a service calibration.

Approvals

Gemini Data Loggers (UK) Ltd. operates a Business Management System which conforms to ISO 9001 and ISO 14001.

CE

Required and Related Products

To use this data logger you will require the following software:

SWCD-0040: Tinytag Explorer software

and a

CAB-0007-USB: Tinytag Ultra/Plus/View USB download cable

The software and cable can be ordered together in a pack using the part number SWPK-7-USB

Further Related Products

SER-9500: Tinytag Data Logger Service Kit
ACS-6000: Trigger Start Magnet

Application Notes

The **CR-0100 Tinytag Dry Shipper*** data logger has been used by customers with the MVE SC2/1v Dry Shipper Vessel.

* This is not classed as a medical device under the terms of the European Medical Device Directives.
Please note use of the logger does not affect the performance of the flask but may affect the manufacturer's warranty.