

ULTRA LOW TEMP. USB LOGGER w/PDF REPORT



Optimize lyophilization by thermal analysis!

Step 1
Completely programmable by users

Step 2
Press **GO** key 5 seconds to activate

Step 3
Put into container or freeze drying

Step 4
Press **GO** key 5 seconds to stop. You may also long press "Mark" to make bookmark

Step 5
Plug into PC to generate PDF and Excel report.

Ordering Code
VZ88165AZ, 88165 logger

*Available for EB project

Ultra low Temp. USB logger w/PDF & Excel report 88165

- Plug & Play. PC software and driver are not required
- Built in PT1000 sensor for dry ice & ultra low temperature, such as lyophilization validation
- Automatically generate PDF/Excel report. Report contains summary, graph and detailed data
- Completely user re-programmable: 6 languages, sampling interval, start delay, alarm delay, unit, alarm range, alarm type, password and user name
- Multiple time use for 1.5 year time or 1 million points



Metric/Imperial



Auto Logging



PDF



EXCEL



EN 12830



RTCA DO-160G



PC Link



USB 2.0



LED Alarm



IP67

Model	88165
Temp. range	PT1000 RTD sensor, -80.0~70.0°C, -112.0~158.0°F
Temp. resolution	0.1°C, 0.1°F
Temp. Accuracy	+/-0.5°C for full range
Logging Type	Multiple Time Use till battery power is low
Meter size	104(L)*28.8(W)*10.5(T) mm
Sampling points	48,000 readings
Operation Lifetime	At least 1 million points or 1.5 years which comes first
Operating temp.	-80~70°C (Logging status); room temp.(PC status)
Operating RH%	Humidity < 80%
Storage temp.	-40~85°C
Storage RH%	Humidity < 90%
Weight	~20g
Battery	1PC 3.6V Lithium battery (installed before shipment)
Sampling interval	30 seconds, 5, 10, 30, 60, 90, 120 minutes
Start delay	0, 5, 30, 45, 60, 90, 120 minutes, 24 hours
Alarm range	-20~-10°C, -10~0°C, 2~8°C, 0~15°C, 0~25°C, 15~25°C, others
Alarm delay	0, 5, 30, 45, 60, 90, 120 minutes
Alarm type	Single Event, Cumulative, Disable
Operation keys	2 Keys (Start/Stop key & Mark key)
LED indicator	REC, Low Bat., High alarm, Low alarm
Standard package	1pc logger in one box, manual, paper box

Application:

- Optimize lyophilization by thermal analysis
- During transportation, record time and temperature for vaccines, biologics, pharmaceuticals and other perishable & temperature sensitive products

