

iMINI (Temperature and Humidity Data Logger)

The New iMINI data logger offers enhanced features and updated software to improve the monitoring of temperature and humidity sensitive products.

Features



- Large LCD display with multi-functional viewing
- Advanced 4 alarm threshold
- Bookmarking and continuous logging features
- Multiple memory options available (8K-128K)
- Remote data access (under development)



Product Codes

Product code	Description	Type	Total Sensors	Sensor Location	Sensor Type
MX-IN-S-8-L	Temperature	Multi-use	1	Internal	NTC
MX-ST-S-8-L	Temperature	Single Trip	1	Internal	NTC
MX-OE-S-8-L	Temperature	Multi-use	1	External	NTC
MX-1E-S-8-L	Temperature	Multi-use	2	1 Internal & 1 External	NTC
MX-2E-S-8-L	Temperature	Multi-use	2	2 External	NTC
MX-HS-S-16-L	Temperature & Humidity	Multi-use	2	2 Internal	Digital sensor
MX-HE-S-16-L	Temperature & Humidity	Multi-use	3	2 Internal & 1 External	Digital sensor & NTC

Certifications:

**2
Year
Warranty**

bsi.

**21 CFR
Part 11**

CE

**NIST
Traceable**

Specifications

Description	Specifications
Program Interval	5 seconds to 17 hours
Time Accuracy	±1 hour per year
Sensors	Internal and /or external
Temperature Range	-40 °C to +80 °C (-40 °F to +176 °F)
Humidity Range	0-100%
Temperature Accuracy	±0.5 °C (-40 °C to -10 °C), ±1 °F (-40 °F to +14 °F) ±0.3 °C (-10 °C to +70 °C), ±0.6 °F (+14 °F to +158 °F)
Humidity Accuracy	±3% (10%-90%) ±4% (<10% and > 90%)
Resolution	0.1 °C / 0.1 °F / 0.1%
Sensor Response Time	Internal Sensor – T90 of 20 minutes in moving air External Sensor – T90 of 5 minutes in moving air
LCD Operating Range	-20 °C to +70 °C (-4 °F to +158 °F)
Alarm Thresholds	4 thresholds; 2 red LEDs, 2 blue LEDs
Alarm Configuration	HIGH HIGH, HIGH, LOW & LOW LOW
Bookmark	Yes
Preprogram Option	User programmable
Start Option	Push button and/or timer
Auto Restart	Yes
Start Delay	Yes, 1 minute to 99 days
Stop Option	Stop button (can be disabled) or timer
Size	83 x 57 x 17mm (excluding lug)
Weight	70 grams (including battery)
Case Material	Polycarbonate/ABS
Battery	3.0V, user replaceable (Panasonic only)
IP Rating	IP65 (with plastic cap over USB connector)
Warranty	24 months, excluding battery (Multi use loggers) One Trip, excluding battery (Single trip loggers)
Calibration	NIST Traceable upon request
Accuracy Certificate	Yes
Other Certification	ISO9001:2008, CE, RoHS
Battery Life	1-2 years (depending on usage)
Interface	USB
Software	Console Plus
Default File Format	CVT
Data Export	PDF, TXT, CSV & CVT
Security	Password protected (programmable using Console Plus Software) encrypted binary file is generated along with PDF

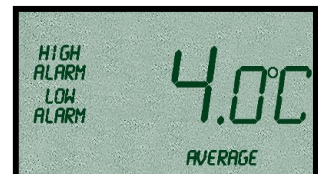
Multifunctional Display



LCD displays the highest recorded reading



LCD displays the lowest recorded reading



LCD displays the average reading for the current trip



LCD displays the time above the specified high alarm setting for the current trip

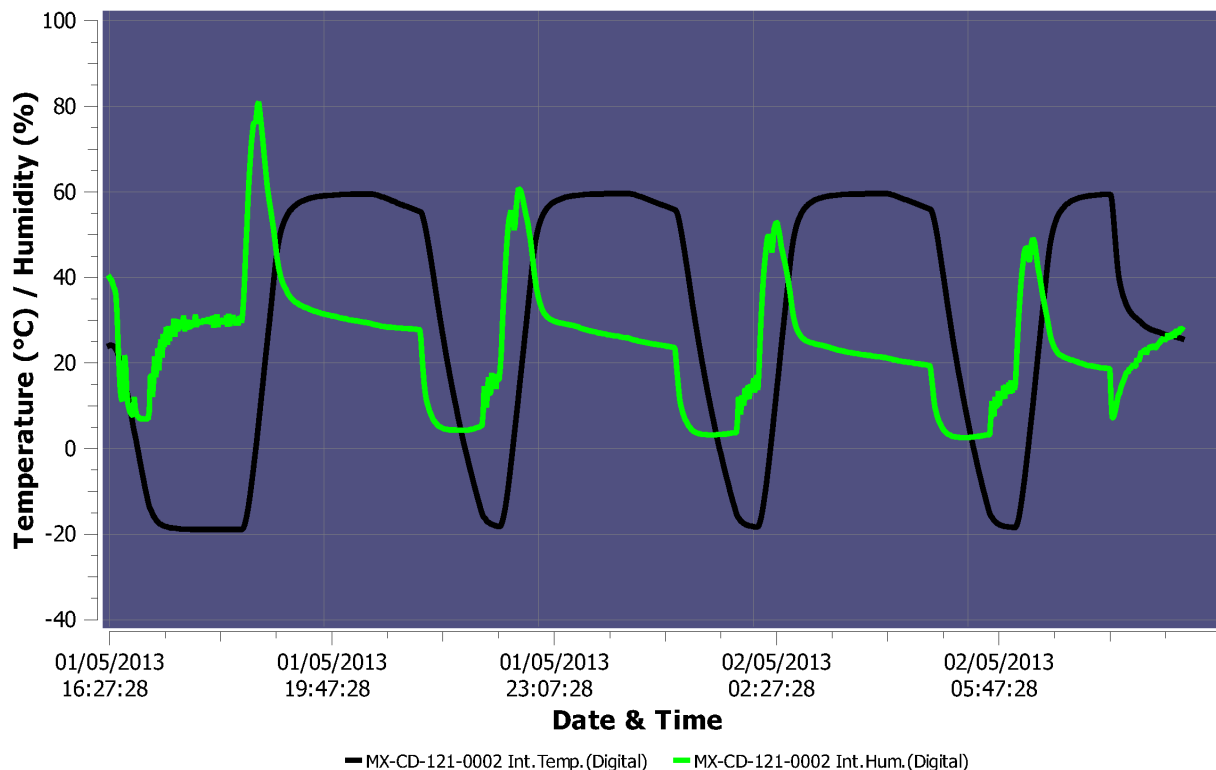


LCD displays the time below the specified low alarm setting for the current trip

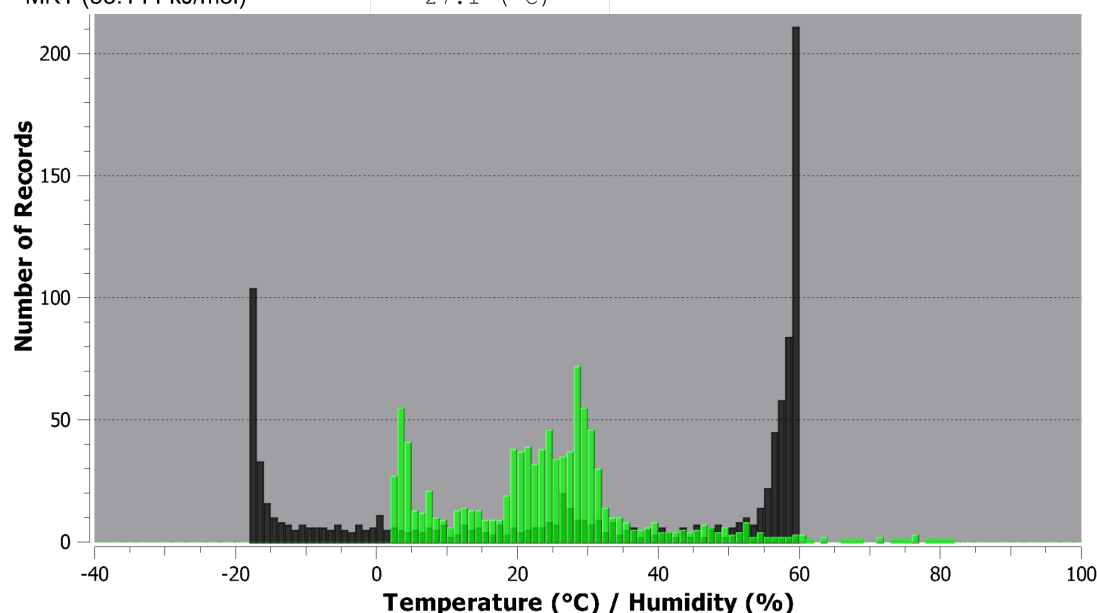
Device Specification

Serial	MX-CD-121-0002
Product Code	MX-HS-S-16-L
Firmware Version	iMini Ver_01_48 4/29/2013
Mem. Size	16k Rec.
Temperature / Humidity	-40/+80 (°C) 0-100%
Battery	High
Trip #	1
Description	Cryopak Verification Tech.
Unit Mode Programmed	Celsius (°C)
Program: Start At:	-
Program: Start button after:	-
Program: Stop At:	00d 00:00
Program: Stop after # records:	-
Program: Interval:	2000
Program: Continuous Logging:	00h01m00s
Program: Stop button enabled:	-
Program: Stop after # records:	Yes
Program: Memory Used:	Yes
Number of Records	24%
Started Time:	2000
Stopped Time:	

MX-CD-121-0002 MX-HS-S-16-L



Alarms	Int. Temp.	Int. Hum.
Alarm HH	60.0 (°C)	80.0 (%)
Alarm H	30.0 (°C)	60.0 (%)
Alarm L	20.0 (°C)	40.0 (%)
Alarm LL	-20.0 (°C)	20.0 (%)
Consecutive alarm delay	1	1
Total alarm delay	1	1
out of specification HH	09h21m00s	00h21m00s
out of specification H	09h21m00s	00h19m00s
out of specification L	05h51m00s	09h24m00s
out of specification LL	05h51m00s	14h55m00s
Value Max:	59.6 (°C)	81.0%
Value Avg:	30.2 (°C)	24.1%
Value Min:	-18.9 (°C)	2.5%
MKT (83.144 kJ/mol)	27.1 (°C)	-



■ MX-CD-121-0002 Int.Temp.(Digital) ■ MX-CD-121-0002 Int.Hum.(Digital)

#	Date	Time	T°C	H%	eT°C	#	Date	Time	T°C	H%	eT°C
1	01/05/13	16:27:28	24.1	40.0		51	01/05/13	17:17:28	-18.0	26.7	
2	01/05/13	16:28:28	24.2	39.6		52	01/05/13	17:18:28	-18.1	23.8	
3	01/05/13	16:29:28	24.1	39.4		53	01/05/13	17:19:28	-18.2	25.9	
4	01/05/13	16:30:28	24.1	38.5		54	01/05/13	17:20:28	-18.2	28.3	
5	01/05/13	16:31:28	23.9	37.7		55	01/05/13	17:21:28	-18.3	24.3	
6	01/05/13	16:32:28	23.6	37.2		56	01/05/13	17:22:28	-18.4	28.6	
7	01/05/13	16:33:28	23.2	35.9		57	01/05/13	17:23:28	-18.5	25.2	
8	01/05/13	16:34:28	22.7	31.4		58	01/05/13	17:24:28	-18.5	28.6	
9	01/05/13	16:35:28	22.1	24.4		59	01/05/13	17:25:28	-18.5	27.4	
10	01/05/13	16:36:28	21.3	18.6		60	01/05/13	17:26:28	-18.6	27.5	
11	01/05/13	16:37:28	20.2	13.7		61	01/05/13	17:27:28	-18.5	30.3	
12	01/05/13	16:38:28	18.9	11.6		62	01/05/13	17:28:28	-18.6	26.2	
13	01/05/13	16:39:28	17.5	11.2		63	01/05/13	17:29:28	-18.6	30.2	
14	01/05/13	16:40:28	16.3	14.6		64	01/05/13	17:30:28	-18.7	28.1	
15	01/05/13	16:41:28	15.3	21.8		65	01/05/13	17:31:28	-18.7	27.6	
16	01/05/13	16:42:28	14.4	19.7		66	01/05/13	17:32:28	-18.7	28.8	
17	01/05/13	16:43:28	13.5	13.4		67	01/05/13	17:33:28	-18.8	28.0	
18	01/05/13	16:44:28	12.4	10.7		68	01/05/13	17:34:28	-18.8	30.1	