

with data storage and event logging

The most popular 6" circular chart recorder of CR2010 series, is also available with internal memory of 64KB to store data up to 14 days at 5minute store interval. This recorder is specifically tailored to monitor the blood bank refrigerator temperature data. This recorder also has an input for Door Open switch. Since door opening and closing is very frequent during the removal of the stored blood, it is very easy to monitor how often and for how much time the door was left open with this recorder. This recorder uses pressure sensitive chart paper so there is no need to replace the pen. There is also no smudging of the ink, and since the paper used is pressure-sensitive rather than thermal, the durability of the recordings is significantly increased. Mains failure and return is also logged. Recorder comes with a built-in battery back up to ensure the proper working in case of power failure. Most other features are similar to the standard CR2010 6" recorder.

Features:

- 6" Chart Width
- Inkless chart recorder
- LCD Display
- Real Time Clock
- Data Storage 64KB of memory
- Event Logging like Power Fail/Restore, Door Open/Close, Alarm Set/Reset
- Storage of 14 days of data at 5min store interval
- USB port to communicate with PC
- BBR-Chart Application to download data
- Generate Reports from BBR-Chart
- Single Analog Input channel
- Direct Input standard PT-100 sensor
- Chart Speed of 7D/Rev
- Universal Power Supply 85-264 V AC, 47-63 Hz
- Battery Back up

Specifications:

No. of Pens	1 – Suitable for marking on Pressure Sensitive Paper
Pen Marking	Continuous
Pen Response Time	<5Sec (Full Scale)
Pen Resolution	Stepper Motor Controlled better than 0.1% FSD
Overshoot	None

Chart:

Chart Speed	7D/Rev
Chart Calibrated Radius	2.3" (approx. 59mm)
Chart Ranges	Programmable

Display, Operator Panels and Input:

Display Type	3½ digit LCD
Status Indicator	RTC, Batch Status, Battery Status
Panel Keys	Front panel KB consisting of 3 keys for programming and calibration
Analog Input	RTD PT-100
Sensor Type and Range	Refer to Table 1
Scan Rate	Continuous 1 reading per second

Memory:

Memory Size	64KB
Data Storage	Up to 14 days at 5min Store Interval
Alarm Records	Yes (Going out of limit and coming back to limit is considered as one alarm record)
Record for Door Open / Close	Yes
Mains Failure Record	Yes
Memory Type	Cyclical – Most recent data is always available

User Settable Parameters for Recording:

Alarm Condition	1 to 99 mins; user settable (through PC)
Occurrence Time Delay	When the temperature remains out of limit for more than set time then only the alarm condition is assumed.
Real Time Clock (RTC)	Settable from Keyboard in DD/MM/YY/HR/MN format
Door Open/Close	Input through Potential Free contact.

Communication:

Communication Type	USB 2.0
PC Application	BBR-Chart™ to download data; Configure recorder and generate report.



Protection:

Input Impedance	> 20 MΩ
CMRR	>100 dB@ 50, 60 Hz at 3 Sample per Second
NMRR	>50 dB@ 50, 60 Hz at 3 Samples per Second
Maximum Common Mode Voltage	5 V AC
Isolation Channel – Earth	1.5KV 1 minute
Isolation Channel – Channel	NA
Input Protection	30 V AC/DC max
Termination	Non interchangeable, Removable Plugs

Environmental:

Temperature	(Operation) 5° C to 45° C (Limiting) 0° C to 50° C (Storage) -20° C to 60° C
Humidity	(Operation) 10 to 80 % RH Non-Condensing (Storage) 5 to 90 % RH Non-Condensing
Altitude	<2000 meter

Power Requirement:

Supply Voltage (Mains Operated)	85-264 V AC 47-63Hz
Battery backup	Yes
DC Adapter Operated	Yes
Power	15 W Max with Maximum Configuration
Fuse Type	None
Battery Backup	7 Ah 12 V, 1.4 A External Lead Acid Battery
Battery Charger	Yes
Battery Reverse Polarity	Protected
Minimum Back up	>72 Hours

Safety Standards:

Safety	IEC 61010-1
EMI-EMC	EN 61326-1 Class A
Pollution Degree	II
Installation Category	III
Vibration	2g Peak (10 Hz-150Hz)
Shock	IEC61010-1
IP Rating	IP30 (Door and Bezel only)

Table 1: Sensor Type, Range, Accuracy and Max Error Specification :

Input Type	Valid Input Range	Resolution Chart	Accuracy
PT-100(RTD)	-100 to +600°C	2%	+/- 0.5% FSD

Table 2: Chart type of Chart Recorder :

Sr. No. (XX)	Range**	Speed	Size	Part No.	Part Description
21	0 to +100	24H	6"	304001	D60100
22	0 to +150	24H	6"	304002	D60150
23	0 to +200	24H	6"	304005	D60200
24	0 to +300	24H	6"	304008	D60300
25	-50 to +50	24H	6"	304016	D6-50+50
26	0 to +160 & -1 to 3	24H	6"	304004	D60160&-1+3
27	+90 to +140	4H	6"	305001	4H90140
28	0 to +100	7 Day	6"	307001	W60100
29	-50 to +50	7 Day	6"	307010	W6-50+50
30	+50 to -50	7 Day	6"	307009	W650-50
31	-100 to +50	7 Day	6"	307005	W6-100+50
32	+50 to -100	7 Day	6"	307008	W650-100
33	+40 to -10	7 Day	6"	307007	W640-10
34	0 to +50	7 Day	6"	307004	W6050
35	0 to +10	7 Day	6"	307012	W6010
36	+20 to -10 (PS)	7D	6"	308009	W620-10PS
37	+50 to -100 (PS)	7D	6"	308008	W650-100PS
39	+40 to -10 (PS)	7D	6"	308003	W640-10PS
40	-50 to + 50 (PS)	7D	6"	210042	W6-5050PS
50	Other Please Specify				

** First value in the chart is at the center of the Chart.

** Chart range low and chart speed are fixed as per the order code.

PS: Pressure Sensitive Chart

Overall Dimension:

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Dimension (L x W x D) mm	232x205x117 mm
Panel Cutout (L x W) mm	198x169 mm
Bezel (L x W) mm	232x205 mm

*Actual specification may vary depending on the optional features installed.

**Refer to the back panel of recorder for exact rating.

Select your ORDER Code: -

Example ORDER Code: 2 7 4 0 3 - X X 1 4 1

- Code : Recorder Type
2 : CR6- NU
- Code : Pen Type
7 : 1 PS# LCD Display
Pressure sensitive pen
- Code : Power Supply
0 : 85-264 V CE
1 : 12-15 V DC
4 : 85-264V CE BB
5 : 85-264V CE with 2x1.5AA battery
6 : 4x1.5V AA battery
8 : 24 V DC
- Code : Relay
0 : None
- Code : PC Interface
0 : USB
- Code : Chart Type
XX : Refer Table for chart type
- Code : Range
0 : Programmable
1 : Fixed, Please specify
- Code : Chart Speed
4 : 7 Day/Rev
- Code : Sensor Type
1 : RTD (PT-100, DIN 43760,α = 0.00385)



Dealer / Representative

- Manufacturers of :
- Circular Chart Recorders
 - Inkless Recorders
 - Paperless Recorders
 - Scanners & Data Loggers
 - Networked Data Loggers
 - Application Software
 - Web based DAQ
 - Vaccine Series Data Loggers

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