6" Circular Chart Recorder

CR2010 series

CR2010 series of circular chart recorders are available in 3 different sizes of the charts i.e. 4", 6" and 11". If you want better readability in small space, this 6" chart recorder is a perfect fit. These recorders are widely used in low temperature equipment, blood banks, incubators and many more places. It takes direct inputs from RTD Pt-100/Thermocouples / process inputs like 4-20mA. Standard chart speed varies from 1 hour/revolution to 255 hours/revolution. These recorders are microcontroller based. Crystal controlled chart drive ensures accurate chart speed. Stepper motors for both pen and chart drive, ensures no lag and no backlash. With a cutout of 200 x170 mm and smallest depth, makes it very convenient to use. Transparent polycarbonate door makes the chart visible from distance. They come with universal power supply as a standard feature.
Other power supply inputs are also available.

Features :

- 6" Chart Width
- One / Two Analog Input channels
- Universal Power Supply 85-264 V AC, 47-63 Hz
- Other power supply inputs on request
- Battery Back up
- Direct Input standard Pt-100 / Thermocouple sensors
- Process Input through 4-20mA
- 1-255 hrs of chart rotation
- Other chart rotation available on request

Specifications:

Pen

No. of Pens	1/2
Pen Marking	Continuous
Pen Response Time	<5Sec (Full Scale)
Pen Resolution	Stepper Motor Controlled better than 0.1% FSD
Overshoot	None

Chart :

Chart Speed	1 hour/rev to 255 hours/rev
Chart Calibrated	
Radius / Size	2.3" (approx. 59mm) / Circular 6" (approx. 150mm)
Chart Ranges	Standard Refer Table 2/ Customized*

Display, Operator Panels and Input :

Display Type	Digital, 8 digit ultra-bright LED Numeric / semi alphabetic
Display Height	0.3"
Status Indicator	Channel number and corresponding parameter values, prompts and messages displayed for ease of setup and programming.
Panel Keys	Front panel KB consisting of 3 keys for programming and calibration
Analog Input	RTD Pt-100 / 4-20mA (External Shunt Resistance) / TCJ-K-R-S-T/ 0-1V
Sensor Type and Range	Refer to the Table 1
Scan Rate	Continuous 1 reading per second

Protection :

Input Impedance	
RTD/VOLT/TC	> 20 MΩ
mA	50 / 2.7 Ω Shunt External
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	5V AC
Isolation Channel – EARTH	1.5KV 1 minute
Input Protection	30V AC/DC Max
Termination	Non Interchangeable , Removable Plugs, Individual For Each Input
Transmitter Power Supply*	Non isolated 15V DC; 30mA max; un protected

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)	85-264V, AC 47-63Hz
Battery backup	Yes
Power	15 W Max With Maximum Configuration
Fuse Type	None

Battery Backup* :

Battery	12V 7Ah External Lead Acid battery
Battery Charger	Yes
Battery Reverse Polarity	Protected
Minimum Back up	>12 Hrs.

Safety :

EMI-EMC	IEC 61326-1 Class A
Safety	IEC 61010-1
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 Resolution

Input Type	Valid Input Range	Resolution Chart	Accuracy (FSD)	Linearization Error (Max)
PT-100(RTD)#	-200 to 850°C	2%	± 0.5%	± 0.7˚C
mA	4-20mA	2%	± 0.5%	± 0.1%

*#DIN 43760: a= 0.00385 *optional*

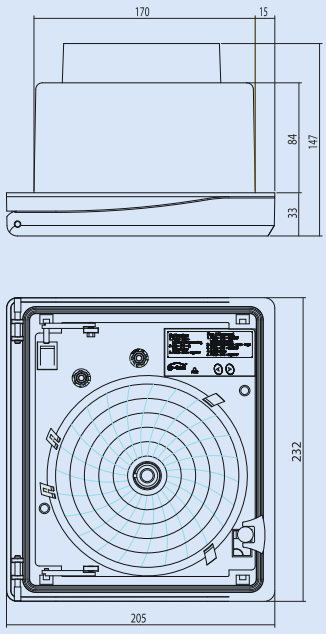
6" Circular Chart Recorder

• Your Ordering Code : mail to sales@gtek-india.com

Table 2 Standard Available Chart Ranges

Chart Type XX	Range**	Speed	Part Number	Part Description
21	0 to +100	24hrs/rev	304001	D60100
22	0 to +150	24hrs/rev	304002	D60150
23	0 to +200	24hrs/rev	304005	D60200
24	0 to +300	24hrs/rev	304008	D60300
25	-50 to +50	24hrs/rev	304016	D6-50+50
26	0 to +160/-1 to +3	24hrs/rev	304004	D60160/-1+3 Dual range
27	+90 to +140	4hrs/rev	305001	4H690140
28	0 to +100	7days/rev	307001	W60100
29	-50 to +50	7days/rev	307010	W6-50+50
30	+50 to -50	7days/rev	307009	W650-50
31	-100 to +50	7days/rev	307005	W6-100+50
32	+50 to -100	7days/rev	307008	W650-100
33	+40 to -10	7days/rev	307007	W640-10
34	0 to +50	7days/rev	307004	W6050
35	0 to +10	7days/rev	307012	W6010
50	Other Please specify			

** First range is at the center of the chart



Overall Dimension : (approx) :	
Dimension L x W x D (mm)	232 x 205 x 117
Panel Cutout (mm) (L x W)	200 x 170
Bezel (mm)	232 x 205

Select your ORDER Code: ☐☐☐☐☐-☐☐☐☐

Example ORDER Code: 2 0 0 0 0 - 2 1 0 0 0

Code : Recorder Type
2 : CR6 NU

Code : Pen Type
0 : 1Pen No display*
5 : 1 PS# No display

*Pen with red ink
#PS = Pressure sensitive pen

Code : Power Supply
0 : 85-265 V AC, 47-63 Hz
1 : 12-15V DC 1Amp
4 : 85-265VAC, 47-63 Hz with BB*
5 : 85-265V AC, 47-63 Hz With TS**
7 : 85-265VAC , 47-63 Hz BB* and TS**
8 : 24V DC 1Amp
*BB=Battery Backup,
**TS=Transmitter Supply, 13-24V DC @ 30mA (max)

Code : Relay
0 : None

Code : PC Interface
0 : None

Code : Chart Type
XX : Refer Table 2

Code : Range
0 : Programmable
1 : Fixed, Same as chart type

Code : Chart Speed
0 : Programmable
1 : 4 Hr/Rev
2 : 8 Hr/Rev
3 : 24 Hr/Rev
4 : 7 days/Rev
9 : Other, Please specify

Code : Sensor Type
1 : RTD Pt 100 DIN 43760; α=0.00385
2 : 4 - 20 mA DC

Dealer / Representative

The specifications given above are an overview, and may be or may not be available in all product variants, or at an additional cost. The company reserves the right to change the specifications without prior notice, as the company follows a continual improvement philosophy for its products.

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

G-TEK CORPORATION PVT. LTD.

3, mahavir industrial estate,
nr. jalaram mandir, karelibaug,
vadodara - 390 018.
tel.: +91-98245 24140
e-mail: info@gtek-india.com
url: www.gtek-india.com

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