

The CR87 Six(6) Inch Chart Recorder Series set the standard for reliable and rugged trend reporting. Choose the right model for your application.



Features/Benefits

- Micro-controller design
- Large LED Display
- Front Panel controls
- Single or continuous chart rotation
- Choose from 120V or 220V models (see chart)
- Battery Backup

- 12 V operation
- Comes with 2 cartridge pens & 60 (6" dia.) assorted charts
- Convenient folding handle
- Snap-on support legs
- Free standing or wall mount
- Weatherproof NEMA type 4X (CSA type 4) case optional



CR87B
Temperature Recorder

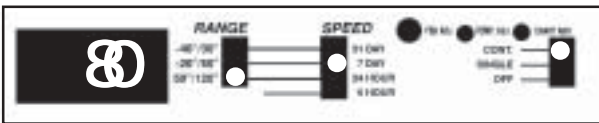
Applications

- Designed for Refrigeration/Freezer, Laboratory and Environmental Applications
- Measures and records temperature in air, gas, liquids, powders, solids, and semi-solids

Features/Benefits

- Temperature range: -40°F to 120°F (-40°C to 50°C)
- Remote readings from up to 100 ft. (optional sensor wire p/n CABLE10T)
- Programmable speed and temperature ranges

Front Panel View



Model No.	Temp. Reading In	Operating Voltage
CR87B	FAHRENHEIT	110-120V, 50/60 Hz
CR87BC	CELSIUS	110-120V, 50/60 Hz
CR87B220	FAHRENHEIT	220-240V, 50/60 Hz
CR87B220C	CELSIUS	220-240V, 50/60 Hz



CR87HT
High Temperature Recorder

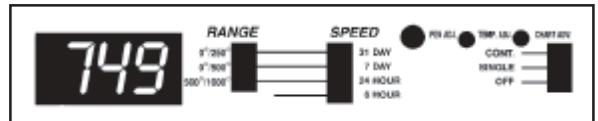
Applications

- Broad range of Temperature Applications
- Measures and records temperature in air, gas, liquids, powders, solids, and semi-solids

Features/Benefits

- Temperature range: 0°F to 1000°F (0°C to 500°C)
- Remote readings from up to 2000 ft. (See accessory table)
- Programmable speed and temperature ranges

Front Panel View



Model No.	Temp Reading In	Operating Voltage
CR87HT	FAHRENHEIT	110-120V, 50/60 Hz.
CR87HT22C	CELSIUS	220-240V, 50/60 Hz.

CR87P Pressure Recorder

Applications

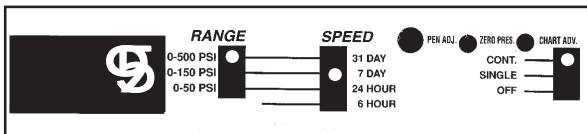
- Run Cycles
- Pneumatic air lines
- Test New installations
- Track intermittent problems

Features/Benefits

- Pressure Range 0 to 500 PSI (0 to 35 BAR)
- Stainless steel 17-4 Pressure sensor with port ¼ NPT
- 2500 PSI burst pressure
- Rated for any gas or fluid compatible with 17-4 stainless steel
- Programmable speed and pressure ranges



Front Panel View



Model No.	Pressure Reading In	Operating Voltage
CR87P	PSI	110-120V, 50/60Hz.
CR87P220	PSI	220-240V, 50/60Hz.
CR87PB	BAR	110-120V, 50/60 Hz.
CR87PB220	BAR	220-240V, 50/60 Hz.

CR87E Event Recorder

Applications

- Time Studies
- Usage Tests
- Verification Tests

Features/Benefits

- Complete with probes for Voltage, Sound and Light
- Displays length of event, time between events or total events
- Programmable speed and event information



Front Panel View



Model No.	Operating Voltage
CR87E	110-120 VAC, 50/60 Hz
CR87E220	220-240 VAC, 50/60 Hz

CR87V Voltage Recorder

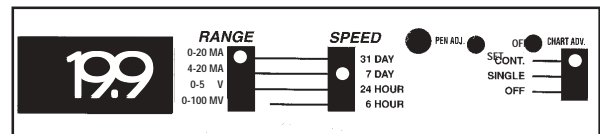
Applications

- Low Voltage or 4-20 ma control circuits
- Process control applications
- Manufacturing

Features/Benefits

- Choose voltage or current measurements
- Voltage Range 0 – 5V
- Current Range 0 – 20 ma
- Programmable speed and voltage or current ranges

Front Panel View



Model No.	Operating Voltage
CR87V	110-120V, 50/60Hz.
CR87V220	220-240V, 50/60Hz.



Custom Series Temperature Recorder

The Custom Series 6 Inch Temperature Recorders have the same general features as the CR87 Series, with the ability to customize your temperature measurement range. The custom unit has an internal temperature sensor and can be placed directly in the environment that it will monitor.

Applications

- Designed for Refrigeration/ Freezer, Storage areas, Laboratories, Computer Rooms, etc.
- Custom temperature range means exact application needs.

Features/Benefits

- Internal Bi-metal Sensor
- Custom Temperature and Speed Selection
- 9V Battery Operation (not included)
- AC Adapter (included)(see accessory table)



Model No. w/Display	Temp. Range	Record Time	Model No. Without Display	Temp. Range	Record Time
SD120F7	-20°F to 120°F	7 Days	SR120F7	-20°F to 120°F	7 Days
SD120F24	-20°F to 120°F	24 Hrs	SR120F24	-20°F to 120°F	24 Hrs
SD100F7	0°F to 100°F	7 Days	SR100F7	0°F to 100°F	7 Days
SD100F24	0°F to 100°F	24 Hrs	SR100F24	0°F to 100°F	24 Hrs
SD90F7	45°F to 90°F	7 Days	SR90F7	45°F to 90°F	7 Days
SD90F24	45°F to 90°F	24 Hrs	SR90F24	45°F to 90°F	24 Hrs
SD50C7	-30°C to 50°C	7 Days	SR50C7	-30°C to 50°C	7 Days
SD50C24	-30°C to 50°C	24 Hrs	SR50C24	-30°C to 50°C	24 Hrs
SD45C7	0°C to 45°C	7 Days	SR45C7	0°C to 45°C	7 Days
SD45C24	0°C to 45°C	24 Hrs	SR45C24	0°C to 45°C	24 Hrs

General Specifications

	CR87B	CR87HT	CR87P
Ambient operating temperature range	32°F to 140°F (0°C to 60°C)	32°F to 140°F (0°C to 60°C)	32°F to 140°F (0°C to 60°C)
Ambient operating relative humidity	96% maximum	96% maximum	96% maximum
Chart speed selectable	6 hours, 24 hours, 7 days, 31 days	6 hours, 24 hours, 7 days, 31 days	6 hours, 24 hours, 7 days, 31 days
Chart rotation mode	Single turn or continuous	Single turn or continuous	Single turn or continuous
Chart speed accuracy	±1%	±1%	±1%
Chart diameter	6 inches	6 inches	6 inches
Display	3 digit LED 0.5"	3 digit LED 0.5"	3 digit LED 0.5"
Display Range			
Primary power supply	120 VAC, 50/60Hz. (220-240 VAC, 50/60Hz. optional CR87B-220) 12 Volt vehicle operation with optional adapter	120 VAC, 50/60Hz. (220-240 VAC, 50/60Hz. optional - CR87HT22C) 12 Volt vehicle operation with optional adapter	120 VAC, 50/60Hz. (220-240 VAC, 50/60Hz. optional - CR87PB) 12 Volt vehicle operation with optional adapter
Battery backup	(8) AA Alkaline batteries (not supplied)	(8) AA Alkaline batteries (not supplied)	(8) AA Alkaline batteries (not supplied)
Battery life	48 hours continuous use	48 hours continuous use	48 hours continuous use
Recording pen	Ink type	Ink type	Ink type
Case size	9 1/4" x 7 1/4" x 2 3/4"	9 1/4" x 7 1/4" x 2 3/4"	9 1/4" x 7 1/4" x 2 3/4"
Weight	4 lbs., 7 oz.	4 lbs., 7 oz.	4 lbs., 7 oz.

Recorder Specifications

			Pressure range 0 to 500 PSI, 0 to 150 PSI, PSI Model 0 to 50 PSI Pressure range 0 to 35 BAR, 0 to 10 BAR, BAR Model 0 to 3.5 BAR
Temp. scale selectable (Fahrenheit)	-40°F to 30°F, -20°F to 50°F, 50°F to 120°F	0°F to +250°F, 0°F to 500°F, 500°F to 1000°F	
Temp. scale selectable (Celsius)	-40°C to 0°C, -30°C to 10°C, 10°C to 50°C	0°C to 120°C, 0°C to 250°C, 250°C to 500°C	
Temperature accuracy	±1°C or ±2°F	±1°C or ±2°F	Pressure accuracy ±1% F.S.
Temperature sensor	15' long sensor wire with 4" Stainless Steel submersible temperature probe	6' long high temperature type "J" thermocouple wire probe. Can not be used in liquid or semi-solid.	±1% F.S. ng Remote pressure sensor Pressure port 1/4 NPT

CR87V	CR87E	Custom Series
32°F to 120°F (0°C to 49°C)	32°F to 140°F (0°C to 60°C)	
96% Maximum 6 hours, 24 hours, 7 Days, 31 Days	96% Maximum 6 hours, 24 hours, 7 days, 31 days	
Single turn or continuous ± 1%	Single turn or continuous ± 1%	± 1.5%
6 Inches	6 inches	6" in diameter (pkg. of 60 included)
	3 digit 0.5" LED to display event 0 - 999 minutes or event counts	
120 VAC, 50/60 Hz., (220/240 VAC, 50/60 Hz. optional - CR87V-220)	120 VAC, 50/60Hz. 220-240 VAC, 50/60Hz. optional - CR87E220)	9 Volt battery (not supplied) or AC adapter (included)
(8) AA Alkaline Batteries (not supplied)	(8) AA Alkaline batteries (not supplied)	
48 hours continuous use	48 hours continuous use	One year
Ink Type	Ink type	
9 1/4" x 7 1/4" x 2 3/4"	9 1/4" x 7 1/4" x 2 3/4"	9 1/4" x 7" x 2 3/4"
4 lbs., 7 oz.	4 lbs., 7 oz.	5 lbs.

Voltage Ranges (Selectable)	0-100mv 0-5V	KEV Range	24 VAC to 270 VAC (50/60Hz.) 24 VDC to 180 VDC	
Current Range	0-20ma 4-20ma	KEL Range	Illumination threshold range 18 Lux to 1900 Lux ±20%	
LED Display	0-5.00 Volts 0-100 mV 0-20.0 ma	KES Range	Sound threshold range 40 dB to 114 dB @ 1Khz ±20%	
Accuracy	0-5.00 Volts ±0.01 Volt 0-100mV ±1mV 0-20ma ±0.1ma 4-20ma ±0.1ma			
				± 2°F
	Event Probes	KEV — AC/DC Voltage detecting with two wire clip leads KEL — A sensitive photocell KES — A sensitive audio transducer		Sensor Bi-metal

Recording Charts

CR87B Series Recording Charts

CR87B Models				
Temp. Range	6 Hrs.	24 Hrs.	7 Days	31 Days
-40°F to 30°F	CR87-4	CR87-1	CR87-7	CR87-19
-20°F to 50°F	CR87-5	CR87-2	CR87-8	CR87-20
50°F to 120°F	CR87-6	CR87-3	CR87-9	CR87-21
-40°C to 0°C	CR87-13	CR87-10	CR87-16	CR87-22
-30°C to 10°C	CR87-14	CR87-11	CR87-17	CR87-23
10°C to 50°C	CR87-15	CR87-12	CR87-18	CR87-24

CR87HT Models				
Temp. Range	6 Hrs.	24 Hrs.	7 Days	31 Days
0°F to 250°F	CR1000-4	CR1000-1	CR1000-7	CR1000-19
0°F to 500°F	CR1000-5	CR1000-2	CR1000-8	CR1000-20
500° to 1000°F	CR1000-6	CR1000-3	CR1000-9	CR1000-21
0°C to 120°C	CR1000-13	CR1000-10	CR1000-16	CR1000-22
0°C to 250°C	CR1000-14	CR1000-11	CR1000-17	CR1000-23
250° to 500°C	CR1000-15	CR1000-12	CR1000-18	CR1000-24

CR87P Series Recording Charts

Range	6 Hrs.	24 Hrs.	7 Days	31 Days
0 - 500 PSI	6H500PSI	24H500PSI	7D500PSI	31D500PSI
0 - 150 PSI	6H150PSI	24H150PSI	7D150PSI	31D150PSI
0 - 50 PSI	6H50PSI	24H50PSI	7D50PSI	31D50PSI

CR87PB Series Recording Charts

Pressure				
Range	6 Hrs.	24 Hrs.	7 Days	31 Days
0 - 35 BAR	6H35BAR	24H35BAR	7D35BAR	31D35BAR
0 - 10 BAR	6H10BAR	24H10BAR	7D10BAR	31D10BAR
0 - 3.5 BAR	6H3.5BAR	24H3.5BAR	7D3.5BAR	31D3.5BAR

CR87V Series Recording Charts

6 Hrs.	24 Hrs.
CR87-57	CR87-58
7 Days	31 Days
CR87-59	CR87-60

CR87E Series Recording Charts

6 Hrs.	24 Hrs.
EVENT-6H	EVENT-24H
7 Days	31 Days
EVENT-7D	EVENT-31D

Custom Series Recording Charts

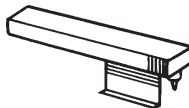
SD & SR Models		
Temp Range	7 Days	24 Hours
-20°F to 120°F	S20120F7	S20120F24
0°F to 100°F	S0100F7	S0100F24
+ 45°F to 90°F	S4590F7	S4590F24
-30°C to 50°C	S3050C7	S3050C24
0°C to 45°C	S045C7	S045C24

*Use 12 hour chart for 1.5, 3 and 6 hour speeds.

Standard 6" diameter recording charts are available for Fahrenheit and Celsius Recorders, and are packaged in quantities of 60 per box.

Replacement Pens

Part No.	Description
CRPEN	Black pen
CRPENR	Red pen
CRPENB	Blue pen



NEMA, Waterproof Case

Part No.	Description
NEMA	Water tight, corrosion Type 4X resistant. (CSA type 4)

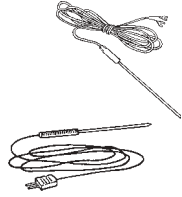


Recorder Accessories

(See Accessory Table for recorder compatibility)

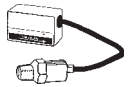
Type J Thermocouple Wire with Sensor for CR86/CR87

Part No.	Description
CR15	15' wire with 4" stainless steel sensor
CR25B	25' wire with 4" stainless steel sensor
CR50B	50' wire with 4" stainless steel sensor
CR75B	75' wire with 4" stainless steel sensor
CR100B	100' wire with 4" stainless steel sensor
CR15B	15' wire with 4" stainless steel sensor



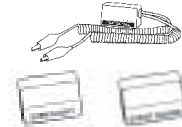
Pressure Sensor For CR87P, CR87PB

Part No.	Description
CR87PA	Replacement pressure sensor and adapter



Event Sensors For CR87E

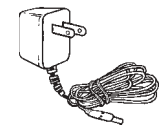
Part No.	Description
KEV	Replacement voltage sensor with adapter
KEL	Replacement light sensor with adapter
KES	Replacement sound sensor with adapter



Power Adapters

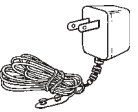
(for CR87B, CR87E, CR87P, CR87HT, CR86, CRTH2 & CRTT2)

Part No.	Input	Output
CRT (USA)	120 VAC	12 VDC
CRT220 (Europe)	220 VAC	12 VDC
CRT220UK (England)	220 VAC	12 VDC



(for Custom Series)

Part No.	Input	Output
DPGT (USA)	120 VAC	9 VDC
DPGT220US (USA)	220 VAC	9 VDC
DPGT220UK (England)	220 VAC	9 VDC
DPGT220EU (Europe)	220 VAC	9 VDC



Extension Cable for CR87B Temperature Sensor

Part No.	Description
CABLE10T	10' cable 100 ft. max



Temperature Sensor for CR87B (31 Day Version)

Part No.	Description
TP15	15' wire with 4" stainless steel sensor



Extension Cable for Adapter (KEV, KEL, KES)

Part No.	Description
CABLE6	6' cable
CABLE15	15' cable
CABLE25	25' cable



Nonsubmersible Type Air Sensor for CRTH2 & CRTT2

Part No.	Description
THP5(CRTH2)	15' with plug-in jack
TTP5(CRTT2)	15' with plug-in jack



High Temperature Sensor for CR87HT

Part No.	Description
HTP5	6' high temperature thermocouple wire
HTP515	15' high temperature thermocouple wire
HTP525	25' high temperature thermocouple wire
HTP550	50' high temperature thermocouple wire
HTP5100	100' high temperature thermocouple wire



Type J Thermocouple Wire for Sensors

Part No.	Description
TCW25	25' wire only
TCW50	50' wire only
TCW75	75' wire only
TCW100	100' wire only



Recorder Accessories		CR87B	CR87J	CR87HT	CR87P	CR87V	CR87E	Custom Recorder
CR15B	15' wire with 4" stainless steel sensor		*					
CR25B	25' wire with 4" stainless steel sensor		*					
CR50B	50' wire with 4" stainless steel sensor		*					
CR75B	75' wire with 4" stainless steel sensor		*					
CR100B	100' wire with 4" stainless steel sensor		*					
CR87PA	Replacement pressure sensor and adapter				*			
KEV	Replacement voltage sensor and adapter						*	
KEL	Replacement light sensor with adapter						*	
KES	Replacement sound sensor with adapter						*	
CRT	Power Adapter	*		*	*	*	*	
CRT220	Power Adapter	*		*	*	*	*	
CRT220UK	Power Adapter	*		*	*	*	*	
DPGT	Power Adapter							*
DPGT220US	Power Adapter							*
DPGT220UK	Power Adapter							*
DPGT220EU	Power Adapter							*
CABLE10T	10' cable	*						
TP15	15' wire with 4" stainless steel sensor	*						
HTP5	6' high temperature thermocouple wire			*				
HTP515	15' high temperature thermocouple wire			*				
HTP525	25' high temperature thermocouple wire			*				
HTP550	50' high temperature thermocouple wire			*				
HTP5100	100' high temperature thermocouple wire			*				
TCW25	Type J Thermocouple Wire - 25' wire only		*					
TCW50	Type J Thermocouple Wire - 50' wire only		*					
TCW75	Type J Thermocouple Wire - 75' wire only		*					
TCW100	Type J Thermocouple Wire - 100' wire only		*					
CRPEN	Black Pen	*	*	*	*	*	*	*
CRPENR	Red Pen	*	*	*	*	*	*	*
CRPENB	Blue Pen	*	*	*	*	*	*	*
NEMA	Recorder in NEMA Enclosure	NR87B		NR87HT	NR87P	NR87V	NR87E	