

SC-5x PRO Datalogger



Series SC5x PRO Scanner / Data logger

The PRO series of SC5x multichannel datalogger has enhanced memory, faster scan speeds, more no of channels, more sensor types, and Ethernet connectivity. The internal SD card has 16GB (expandable to 32GB) of storage capacity. The Monochrome LCD display allows user to continuously monitor the current data values with good readability and settings of configurations. Though only 6 keys are used, new user friendly and intuitive menu sequence makes it very easy to configure the scanner and get going quickly. It also has a USB host connectivity and data is automatically downloaded from internal SD card to memory device. There are host of optional features to choose from to suit your budget and needs. When used over TCP/IP, it can easily form a part of the large networked data loggers. It also supports gtekNet™ web based software.

Features:

- Universal Input
- Number of Channels: 8, 16, 24, 32
- Scanning Speed: All Channel in 15 Seconds
- User settable resolution up to 0.0001
- 21CFR Part 11 compliance
- Built-in SD Card (Optional) Storage - 16GB.
- USB Host Interface
- If flash drive is connected then the data is downloaded automatically
- Ethernet connectivity
- Device Configuration from Desktop Application: gtekNet™
- MODBUS TCP/IP Compliant
- Dot Matrix printer interface
- The store interval is possible from 1 second up to 18 hours
- The Printing interval is possible from 1 minute up to 18 hours
- Individual High low alarm setting
- 1 Relay Output
- Transmitter Power Supply

Specifications:

Display and Operator Panels:

Display Type	4x20 Characters backlit LCD display white over blue
Status Indicator	Various LED indication for Data Storage, Device health, SD Card mount status, USB pen drive mount status and Alarm status Indication for each channel
Panel Keys	Front panel KB consisting of 6 keys for programming and configuration setting.
Real Time Clock (RTC)	Scrolling of RTC along with other data; user can also fix one line to continuously Display RTC.
Event Notifications	Different events are notified on display
Display Blinking	on Alarm high / low Condition
Error Code	Various faults are indicated using Error Code on Display
Display Action	Display Rolling and Freeze (Does not Display skipped channel)
Log memory	% Log memory available on display
Sensor Connectivity	Sensor Failure Indication on Display (Open or Short)

Analog Input Details

No of Inputs	8/16/24/32 Channels Max.
Sensor Input Type; Range and Accuracy	Types J, K, R, S, T
RTD	PT-100; DIN43760, $\alpha=0.00385$
Vdc	0-1V; $\pm 1V$; 0-5V; $\pm 5V$
mA	4-20mA; 0-20mA (External Shunt Resistance of 50 Ω 0.1%)
Accuracy	$\pm 0.25\%$ FSD ± 1 digit
Linearization	Polynomial Based Software Linearization
Resolution	0.1
CJC Error	$\pm 0.9^\circ\text{C}$ for 0-50 $^\circ\text{C}$
Sensor Type and Range	Refer Table 1
Data Scan Rate	Maximum 15 Seconds for all Channels

Protection :

Input Impedance RTD/TC /Volt	> 20 M Ω
Input Impedance mA	50 $\Omega \pm 0.1\%$, Shunt External
CMRR	>=110 dB@ 50, 60 Hz at 50 Sample per Second
NMRR	>= 80 dB@ 50, 60 Hz at 50 Samples per Second
Max. Common Mode Voltage	5V AC
Isolation Channel – EARTH	2.5KV, 1 Minute
Input Protection	30V AC/DC Max

Batch Storage / Data Memory Details :

Start / Stop	Key Press / Remote Start - Stop
Store Interval	1 Second to 18 Hrs
Memory Size	16GB Standard / Expandable to 32GB / Stop on Full



General :

Termination	Non Interchangeable, Removable Plugs, Individual For Each Input
Max No of Input Cards Per Device	4 (8 channels each)
Password Protection	Optional
Device RTC set	Set Device RTC from application (So that PC and Device RTC are in sync while starting the batch)

Environmental :

Temperature	(Operation) 5 $^\circ\text{C}$ to 45 $^\circ\text{C}$ (Limiting) 0 $^\circ\text{C}$ to 50 $^\circ\text{C}$ (Storage) -20 $^\circ\text{C}$ to 60 $^\circ\text{C}$
Humidity	(Operation) 10 to 80 % RH Non Condensing (Storage) 5 to 90 % RH Non Condensing
Altitude	<2000 meter

Power Requirement :

Supply Voltage	85-264VAC 47-63Hz
Power	15W Max with Maximum Configuration

Transmitter Power Supply :

No of outputs available	1
Voltage	12-15V DC
Max Load current	30mA
Short circuit protection	Yes
Isolation	None

Communication :

PC Interface	Ethernet TCP/IP
Ethernet	10 /100 Base T (IEEE 802.3)
Connector	RJ45
Protocols Supported	MODBUS TCP/IP; HTTP; FTP
Communication Activity LED	Yes
Isolation (Terminal – GND)	1KV, 1minute
Printer Interface	Centronics Port
USB Host	If flash drive is connected then the data is downloaded automatically

Relay Output Details :

Max. no. of Relay	1
Max. no. of relay group	8 (any channel/set-point can be assigned to any group)
Output Type	1 Form C
Alarm Set-point	High/Low individually settable for each channel
Life Expectancy	Mechanical: 10 \wedge 7 operations Electrical: 10 \wedge 5 operations
Relay Contact	1A 230VAC resistive
Relay Refresh Rate	5 Sec
Isolation Relay contact – GND	1.5KV 1 Minute

Safety :

Safety/EMI-EMC	IEC 61010-1/ EN 61326 Class B
Pollution Degree	II
Installation Category	III
Vibration	2g Peak (10Hz-150Hz)
Shock	IEC 61010-1
IP Rating	IP20

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

Table1: Accuracy and Range Table for various sensor inputs

Sensor Accuracy at 25 °C						
Sensor Type	Standard	Range	Error	Error% Input	Error% Range	Error Temperature Coefficient ppm/°C
RTD Type						
Pt 100	IEC751	-200 To +850	±0.01°C	±0.04%	±0.04%	30ppm
T/C Type						
B	IEC584.1	+200 To +1800	±0.03°C	±0.05%	±0.06%	25ppm
C	Hoskins	0 To +2300	±0.12 °C	±0.05%	±0.06%	25ppm
E	IEC584.1	-100 To +1000	±0.03°C	±0.05%	±0.06%	25ppm
J	IEC584.1	-200 TO +1200	±0.02°C	±0.05%	±0.06%	25ppm
K	IEC584.1	-200 To +1372	±0.04°C	±0.05%	±0.06%	25ppm
N	IEC584.1	-200 To +1300	±0.04°C	±0.05%	±0.06%	25ppm
R	IEC584.1	0 To +1750	±0.04°C	±0.05%	±0.06%	25ppm
S	IEC584.1	100 To +1750	±0.04°C	±0.05%	±0.06%	25ppm
T	IEC584.1	-100 To +400	±0.02°C	±0.05%	±0.06%	25ppm
Volt						
0 – 1 Volt	-	±9999	-	±0.03%	±0.03%	25ppm
±1 Volt	-	±9999	-	±0.03%	±0.03%	25ppm
0 – 5 Volt	-	±9999	-	±0.03%	±0.03%	25ppm
±5 Volt	-	±9999	-	±0.03%	±0.03%	25ppm
mA – DC (External Shunt 50 Ω 0.1%)						
4-20mA	-	±9999	±0.1%	±0.03%	±0.03%	25ppm
0-20mA	-	±9999	±0.1%	±0.03%	±0.03%	25ppm

Select your **ORDER Code**:

-

Example **ORDER Code**:

5

1

5

0

-

4

0

0

Code : Series

5 : 5x Pro Series

Code : Channels

1 : 8

2 : 16

3 : 24

4 : 32

Code : PC Interface

5 : TCP/IP & USB host

Code : Relay

0 : None

1 : 1 Relay

Code : Software*

2 : None

4 : gtek Net Non Secure

5 : gtek Net Secure

* PC interface required

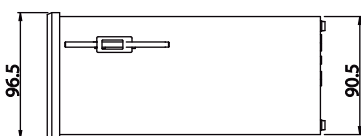
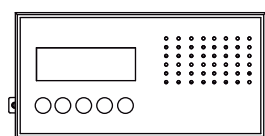
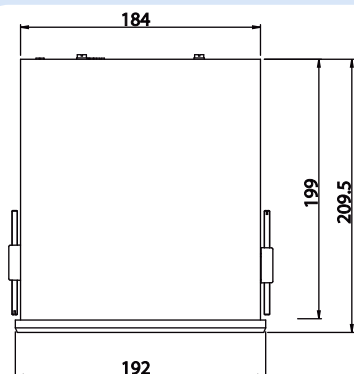
Code : HW Type

0 : non 21CFR

1 : 21CFR Compliant

Code : Sensor Type

0 : Universal Input



Overall Dimension:

Dimension L x W x D (mm)
Panel Cutout (mm)

210 x 192 x 96
184 x 92



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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