

SC – 9x Series Datalogger

Series SC9x PRO Scanner / Data logger

The **PRO series of SC9x multichannel data logger** is a high-speed data logger. They incorporate the state of the art Sigma Delta ADCs with 24bits of resolution for high accuracy and speed. 4x20 characters backlit LCD display with white over blue characters make it visible from the distance. These data loggers measure up to 32 channels of any process parameters or standard RTD and Thermocouple inputs. Scanning all the channels, be it 8 or 32, in less than 3 seconds, makes it very useful for validation of any process. With internal memory for storing data, it helps store validation parameters and retrieve them later for generating reports. These data loggers along with gtekNet™ series of Software makes a complete solution for 21CFR Part II compliance. Various industry specific validation reports are built-in to the software. This makes it very easy for the user to meet the qualification / validation requirements of the certifying agencies and meeting various quality standards. User defined Password protected menus does not allow any unauthorized changes either from PC or from key-board. Every change is reported either online or in offline mode. TCP/IP, Ethernet port is a standard. USB host is available as an option to connect external mass storage device to store or transfer the data. It also supports MODBUS TCP/IP protocol. It can easily form a part of the large networked data logger.

Features:

- Universal Input.
- Number of Channels: 8, 16, 24, 32
- Scanning Speed: All Channel in 3 Seconds.
- User settable Resolution up to 0.0001.
- 21CFR Part 11 compliance.
- Built-in SD Card Storage - 16GB. Expandable to 32GB.
- USB Host Interface.
- Automatically download data in Flash Drive.
- Ethernet connectivity.
- Device Configuration from remote application.
- 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	Refer to Table 1
Linearization	Polynomial Based Software Linearization
Resolution	User settable up to 0.0001
CJC Error	±0.25° C for 0-50° C
Data Scan Rate	Maximum 3 Seconds for all Channels

Protection :

Input Impedance RTD/TC /Volt	> 20 MΩ
Input Impedance mA	50Ω Shunt External
CMRR	>=110 dB@ 50, 60 Hz at 50 Sample per Second
NMRR	>= 80 dB@ 50, 60 Hz at 50 Samples per Second
Maximum 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° 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	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	NA

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	Automatically download data in Flash Drive

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: 10^7 operations Electrical: 10^5 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**:

9

1

5

0

-

4

0

0

Code : Series

9 : 9x 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**

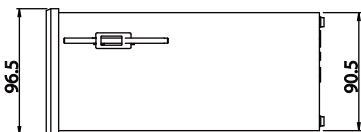
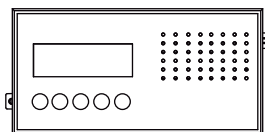
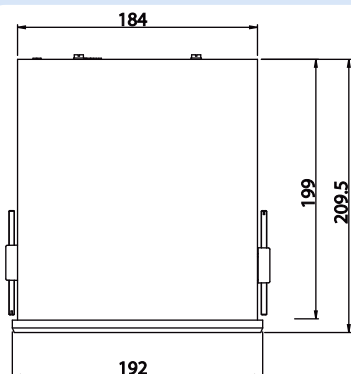
Code : HW Type

0 : non 21CFR

1 : 21CFR Compliant

Code : Sensor Type

0 : Universal Input



Overall Dimension:

Dimension L x W x D (mm)	210 x 192 x 96
Panel Cut out (mm)	184 x 92



Dealer / Representative

Manufacturers of :

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- Inkless Recorders
- Paperless Recorders
- Scanners & Data Loggers
- Networked Data Loggers
- Application Software
- Web based DAQ
- Vaccine Series Data Loggers

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