Display Recorders

Product Overview

■ Overview

Comprehensive range for all requirements

SIREC process recorders are used in many industries. The SIREC D spectrum covers all important industries and areas - including environmental protection. Whether continuous monitoring of process parameters, system maintenance, process optimization or troubleshooting: the wide range of SIREC D products accommodates every requirement and delivers impressive performance along the entire production line.

SIREC D Display recorders

	SIREC D200	SIREC D300	SIREC D400
Description	The SIREC D200 is a competitive display recorder in 144 mm x 144 mm format with 5.7" color TFT-display	The SIREC D300 is a multifunctional display recorder in 144 mm x 144 mm format with 5.7" color TFT-display	The SIREC D400 is a high-end display recorder in 300 mm x 300 mm format with 12.1" color TFT-display
Channels	From 3 to 12 analog channels and up to 8 digital channels	From 8 to 16 analog channels and up to 16 digital channels	From 16 to 48 analog channels and up to 48 digital channels
Format	144 mm x 144 mm	144 mm x 144 mm	300 mm x 300 mm
Display	5.7" color TFT-display	5.7" color TFT-display	12.1" color TFT-display
Weight	About 3.2 kg	Max. 3.5 kg	Max. 10 kg
Type of protection	IP54 (NEMA 3)	IP54 (NEMA 3)	IP54 (NEMA 3)
Data buffer (intern)	1 GByte (optional 2 GByte)	1 GByte up to 4 GByte	1 GByte up to 4 GByte
Data buffer (extern)	Via USB Interface	Via USB Interface or by SD card	Via USB Interface or by SD card
Sampling rate	100 (optional)/200/500 ms for all channels	20 (optional)/100/200/500 ms for all channels	20 (optional)/100/200/500 ms for all channels
Interface	Ethernet TCP/IP	Ethernet, RS 485 Modbus, USB, slot for SD card	Ethernet, RS 485 Modbus, USB, slot for SD card
Operation	Touch-Screen with rapid navigation	Touch-Screen with rapid navigation	Touch-Screen with rapid navigation
Configuration	On device or by way of SIREC D Manager or Server-Software	On device or by way of SIREC D Manager or Server-Software	On device or by way of SIREC D Manager or Server-Software
Password protection	Up to 4 levels with up to 50 different users available	Up to 4 levels with up to 50 different users available	Up to 4 levels with up to 50 different users available
Options	Firmware options individual selectable by a flexible creditsystem	Firmware options individual selectable by a flexible creditsystem	Firmware options individual selectable by a flexible creditsystem

SIREC D Software

Various high-performance software packages are available as options for parameter setting, real-time display and storing, evaluation, analyzing and archiving.

SIREC D-Viewer (included in the scope of supply)
- Import of offline data from e.g. USB media and evaluating
- Display and printing of the imported data

SIREC D-Manager
- Offline data analysis of stored data
- Display, export and printing of imported data
- Archiving of measurement data

SIREC D-Server
- Network-compatible software package for connection of an unlimited number of recorders
- Communication via Ethernet/TCP/IP
- Real-time or FTP data transfer
- Display, export (CSV files) and printing of measurement data
- Archiving of measurement data

SIREC D-Designer
- Customized displays for SIREC D300 and SIREC D400
- Customer specific and application related
- Customized display combinations with bar graphs, trends, digitals

■ Overview
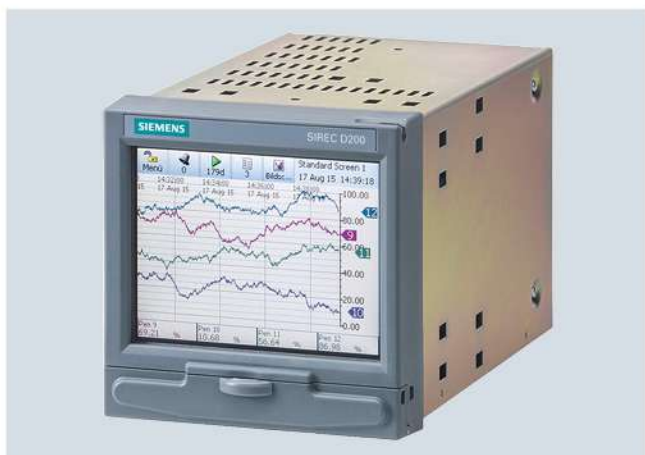
Crystal Clear Display

- 5.7" Digital Colour LCD (TFT)
- QVGA Resolution (320 x 240 pixels)
- Clear and intuitive operation
- Industrial rugged Touch Screen with rapid navigation

Comprehensive Connectivity

- 10/100 Ethernet (DHCP), web and e-mail
- FTP and TCP/IP
- Front USB port as standard for keyboard and mouse. Optional SD Card slot.

Data Storage

- On-board non-volatile memory - up to 2 GByte
- Removable USB storage
- No moving parts - all solid state Flash memory

Security Stringent - Total Data integrity

- Password Protection - 21CFR Part 11
- ESS - Extended Security System
- Password Network Synchronization

Plus..

- Health Watch for preventative maintenance
- Remote Access - Advanced Software Data Analysis at your PC
- Independent Chart and Logging speeds
- Global Language Support
- Rapid review and replay of data at recorder
- Approvals - CE
- NEMA 4X/IP66 (option)
- Up to 10 Hz (100 ms) Logging (including expansion card option)
- Up to 12 Analog Inputs
- Remote Viewing Tool
- 4 Pulse Inputs via the Digital I/O card (option)
- Concurrent Batch mode
- AMS2750 Process Capabilities

■ Function

Display

5.7" Colour Active TFT

With more than 256 000 colours makes it easy to interpret process data and take action with the intuitive bar charts, digital values, trends or trends displays. A screen saver function can be set from 1 to 720 minutes to extend the life of the backlight.

Touch Screen

The heavy duty durable touch screen provides easy data entry and rapid navigation through the menus. The touch screen operator interface provides fast, easy access to the recorder menus making set up and data analysis quick and efficient.
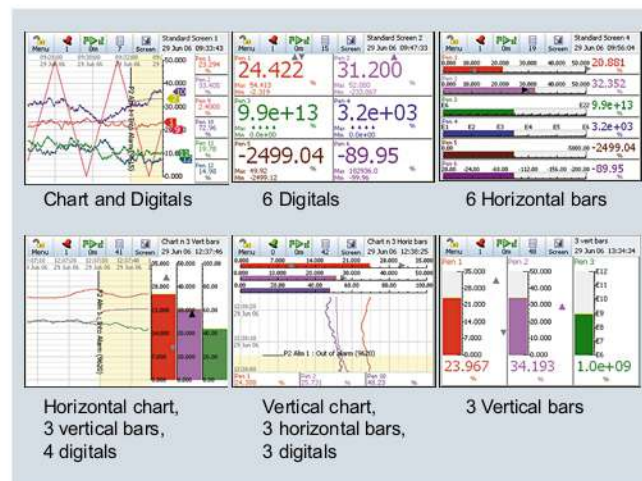
Navigation through the menus and text entry are direct and intuitive:
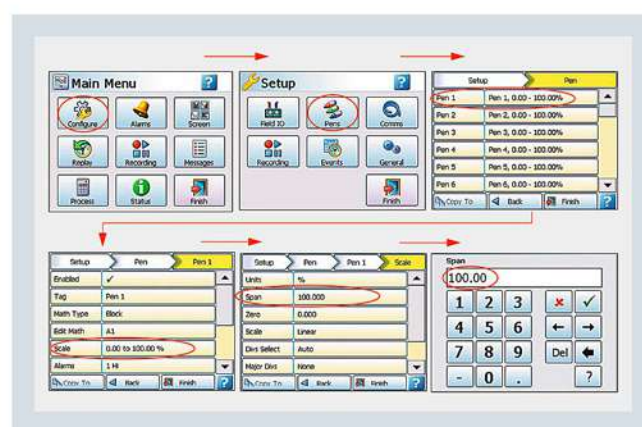
Example of a recorder menu path from the Main Menu to Pen Scale configuration with clear and rapid navigation

Standard Screens

Up to 12 screens displaying multiple combinations of Charts, Bars and Digitals can be configured, 6 examples below.

| Chart and Digitals | 6 Digitals | 6 Horizontal bars |

| Horizontal chart, 3 vertical bars, 4 digitals | Vertical chart, 3 horizontal bars, 3 digitals | 3 Vertical bars |

Help Files

A complete contextual help system can be accessed and visualised on the screen of the recorder.

Display Recorders

SIREC D200

■ Options

Options - Hardware

Alarm Card

- 4 or 8 outputs relay contacts SPCO 240 V
- 8 Digital I/O - SPNO 24 V DC
- Programmable alarm set points can be configured to activate up to 8 outputs

Portable Recorders

- Portable cases available as an accessory item

Digital Input
Two digital input options are available:

- 2 inputs on 8 channel Alarm card,
- 8 inputs on Digital I/O card.
  The digital inputs allow users to initiate, from a remote location via a dry contact closure, selected recorder functions.
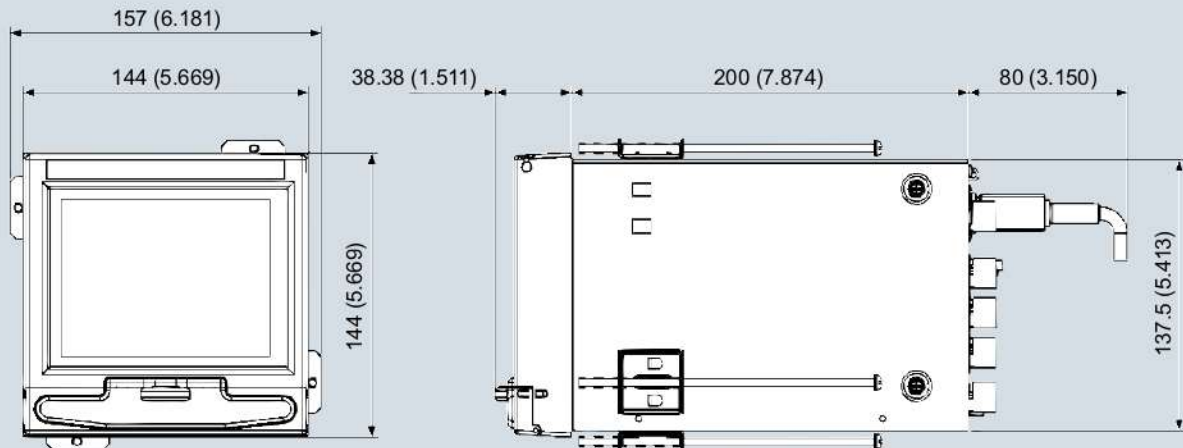
24 V AC/DC Power Supply

- 12 to 30 V DC
- 12 to 20 V AC

24 V DC Transmitter Power Supply

- Can supply up to 130 mA to external transmitters.
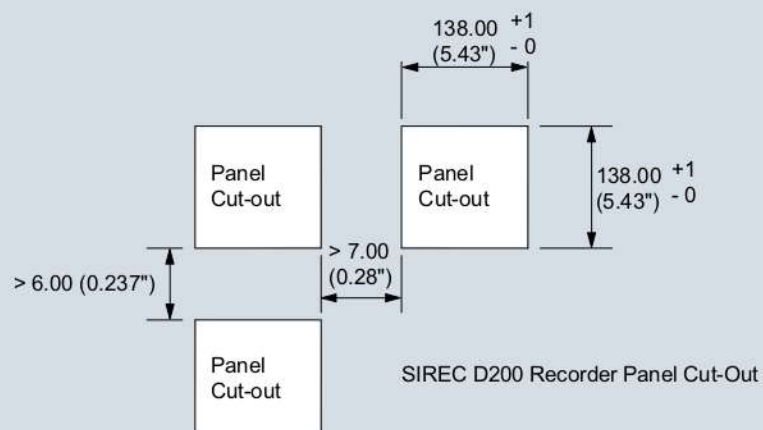
Print Support

- Network printing from status, message and replay screens. Plus screen capture facility of process screens instantly using a basic USB standard PCL printer.
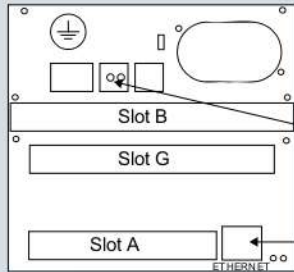
■ Dimensional drawings

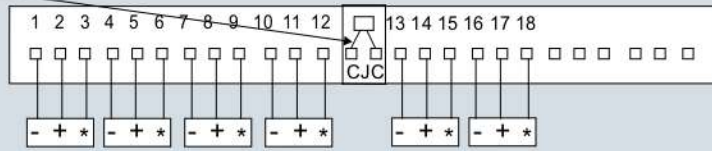Two mounting brackets are supplied as standard

SIREC D200 Recorder Panel Cut-Out

SIREC D200, dimensions in mm (inch) and panel cut-out

■ **Schematics**

CJC Connector position

Analogue Input 3 and 6 channel expansion (option) - Slots B

1 2 3 4 5 6 7 8 9 10 11 12   CJC   13 14 15 16 17 18

- + * - + * - + * - + *   - + * - + *

Slot B

Slot G

24 V TX Power Supply 2-way connector

Slot A

Ethernet

4 and 8 Relay Alarm (option) - Slot G

1 2 3 | 4 5 6 | 7 8 9 | 10 11 12 | 13 14 15 | 16 17 18 | 19 20 21 | 22 23 24

NC C NO NC C NO NC C NO NC C NO NC C NO NC C NO NC C NO NC C NO

Last 2 channels can be Digital Inputs on 8 Alarm Relay card
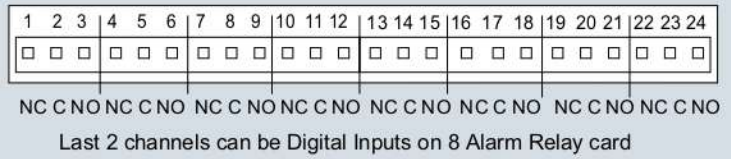
Analogue Input 3 and 6 channel - Slots A

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18

- + * - + * - + * - + * - + * - + *
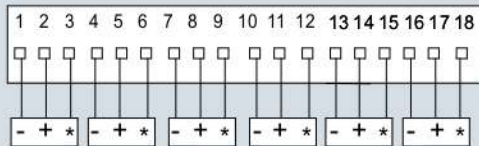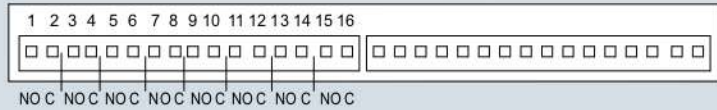
Key: NO = Normally Open , C = Common, NC = Normally Closed

8 Digital Input/Output (option) - Slot G

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16

NO C NO C NO C NO C NO C NO C NO C NO C

SIREC D200 - Terminal assignments and power requirements (rear of unit)

■ **More information**

Additional information is available in the Internet under:

http://www.siemens.com/sirec