

MODEL S-4002

Environmental Data Acquisition System



Features

HARDWARE

- ◆ Pentium IV 2.0 GHz processor, 256 Mb RAM
- ◆ 40 Gb Hard Disk
- ◆ 1.44 Mb FDD
- ◆ CD Driver
- ◆ 10" TFT Display
- ◆ 1 Mb SVGA Graphic Controller
- ◆ 19" Keyboard with integrated Mouse
- ◆ Rugged construction 19 Inches

Options:

- ◆ Internal Modem 56 Kbps (optional)
- ◆ Colour Graphic Screen (192x146 mm, Front Panel Height 5 Units 222 mm)
- ◆ Up to nine serial Ports

Digital Inputs/Outputs

- ◆ 16 Inputs and 16 Outputs, expandable.
- ◆ 2 RS-232 Serial Ports
- ◆ 2 USB connectors
- ◆ Parallel port (Centronics type)
- ◆ Pulse and or frequency counter

Analog Inputs

- ◆ 16 single-ended or differential, expandable
- ◆ Sampling rate 1 second
- ◆ Precision better than 0.1 % F.S.
- ◆ Ranges: $\pm 0.3125, 0.625, 1.25, 2.5, 5V$ (others available)
- ◆ A/D Converter 12 bits resolution (standard, others available)

DESCRIPTION

Data Acquisition System SIR SCADA S-4002 has been designed and developed by SIR based on our experience in the installation and service of ambient and water measurement installations as well as meteorological stations and networks.

This system, rugged and reliable, combines functionality and ease of use with state-of-the-art technology. Designed for continuous, unattended operation, the S-4002 works as a stand-alone unit or as part of a distributed network.

The S-4002 advanced design allows it to: collect, average and report data from instruments and sensors; monitor instrument status and automatically edit data accordingly; perform automatic zero/span or multipoint calibrations; provide alarm indications; and provide communications with a central computer via modem.

All the software runs under Windows, and the user interfaces with S-4002 through the 19" keyboard with integrated mouse, which makes the software very intuitive and easy to learn and use without sacrificing power or flexibility.

Data Acquisition Software

Data Acquisition System Model S-4002 is supplied with data acquisition and storage software package and with communications software.

The basic functions of these software packages are:

- Acquisition of the analog and digital signal of the different instruments.
- Real-time presentation of the signals.
- Signal processing for recording and/or transmitting, applying them their particular statistical treatment (averaging, maximum, minimum).
- Set up of all the parameters related to the acquisition (sampling interval, average interval, etc.).
- Setup of all the parameters related to the acquisition of data from each sensor (type and range of the signal input, zero and full scale values, engineering units conversion, alarm limits, etc).
- Transmission of the recorded values.
- Automatic transmission of alarms to the Central site.

This software allows the future inclusion of new parameters. It has enough capacity to store data from several years and, as the central site is the one who asks the data, it is possible to get data from several central sites.

Others software modules can be implemented to adapt model 4002 to the user requirements.

Multi-tasking software allows simultaneous acquisition and processing of analog and serial sensors outputs.

Graphics of complex chromatograms can storage and present in the graphic display (BTX, Ozone Precursors, etc)

Núm. de Evento: 1 Evento Activo
Descripción: Calibración Ozono

Válido desde: 27/11/1998 21:53
 Válido hasta: 28/11/2738 0:00
Frecuencia del evento: 1 días 0 hrs. 0 min. 0 seg.
Tipo de evento: Salidas Digitales

Antes de comenzar, arrancar el evento 0 y esperar su final.

Arranque Evento: XXXX-XXXX-XXXX-XXXX
Final Evento: XXXX-XXXX-XXXX-XXXX
Duración: 0 hrs. 15 min. 0 seg.

Example of Calibration Event

PDWDAS - Configuración

Alarmas | Eventos | Calibraciones | Comunicaciones

General | **Canales** | Validación

Canales
C0: SO2 (ug/m3N)
C1: NO2 (ug/m3N)
C2: Ozono (ug/m3N)
C3: Particulas (ug/m3N)

Presentación
Nombre del Canal: NO2 Formato: numérico
Unidades de Medida: ug/m3N

Adquisición
Tipo de Canal: Analógico Nº Canal: 1
Cálculo X-minutal: Media Aritmética
Tipo de Entrada: Sencilla
Rango de Entrada: ±5 V

Conversión de Unidades
Entrada Mín.: 0 V Entrada Móx.: 5 V
Salida Mín.: 0 ug/m3N Salida Móx.: 1000 ug/m3N

Example of Parameters Set-up

Contact SIR,S.A. for further specifications and/or specific applications.