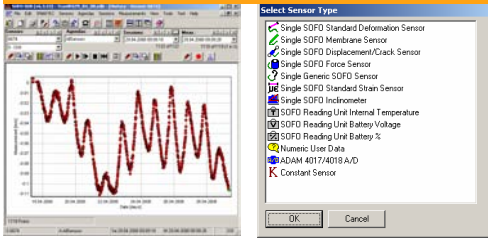


20.1010 SDB SOFTWARE



GENERAL DESCRIPTION

The SDB software is an integral part of SMARTEC monitoring system. It is fully compatible with all SMARTEC monitoring systems and is designed for the static data acquisition, data representation and for the control of SOFO and MuST reading units, ADAM modules, FISO, SOFO optical switches, and other data acquisition devices.

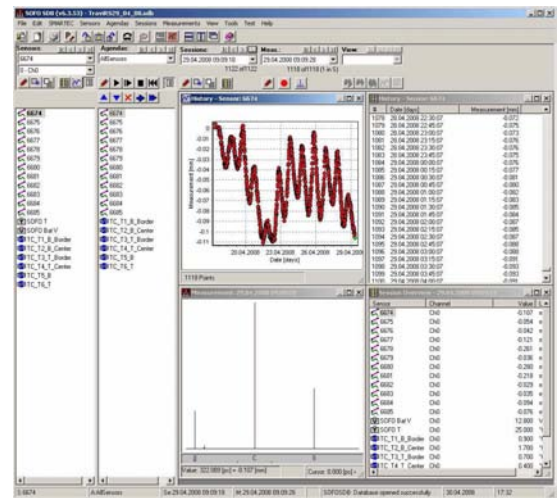
Additionally the SDB software allows storing and managing data in Database form.

TECHNICAL DESCRIPTION

The main functions of this software are aimed to measure sensors either interactively with the user or automatically according to a pre-defined schedule. The operator can view on-site the sensor's measurement history in graphical and tabular form.

The program stores all information related to a given project in a single database structure. All data can be easily exported to SDB advanced analysis packages and third-party software including MS Excel and MS Access.

Multiple users can access the same SDB file simultaneously from different PC (locally or remotely over a modem or LAN).



FEATURES

- Control of the SOFO Reading unit
- Automatic sensors configuration
- Automatic measurement analysis of single sensors
- Automatic and scheduled static measurements
- All project results stored in a single relational database
- Direct sensor history display
- Data export
- Fully compatible with all SMARTEC monitoring systems and sensors

MAIN FUNCTIONS

Measurement functions	Measurement of all types of SOFO sensors, Optical switches control, MuST Sensors, FISO Sensors, Vibrating wires, Measurement of ADAM sensors, Results storage in the SDB structure.
Display functions	Scan display, Peak positions, Sensor history graph, Sensor history table, Session overview.
Automatic and scheduling functions	Sensor measurement programming, Looped or scheduled measurements.
Long term static data acquisitions	In order to optimize the Database size and performance, the SDB is suitable for the management of long term static monitoring projects with maximal data acquisition frequencies of 6 measurements/hour (typical)

HARDWARE REQUIREMENTS

Processor	Min. Pentium III
RAM memory	Min 256 Mb
Hard Disk	Min 1 GB free
Display	Min 1024 x 768

SDB SOFTWARE SCREEN SHOT

The screenshot displays the SOFO SDB (v6.3.53) software interface. The main window is titled 'SOFO SDB (v6.3.53) - TraviRS29_04_08.sdb'. It features a menu bar (File, Edit, SMARTEC, Sensors, Agendas, Sessions, Measurements, View, Tools, Test, Help) and a toolbar with various icons. The interface is divided into several panes:

- Sensor list:** A tree view on the left showing a list of sensors (6674 to 6684) and their channels (SOFO T, SOFO Bat V, TC_T1_B_Border, TC_T2_B_Center, TC_T3_T_Border, TC_T4_T_Center, TC_T5_B, TC_T6_T).
- Agenda list:** A list of measurement sessions (Agendas) with columns for date and time.
- Measurement plot:** A graph showing 'Measurement [mm]' vs 'Date [days]' with a red line plot and data points.
- History window:** A table showing 'History - Sensor: 6674' with columns for '#', 'Date [days]', and 'Measurement [mm]'. It contains a list of data points from 1076 to 1100.
- Measurement:** A window showing a single measurement value: 'Value: 322.089 [ps] = -0.107 [mm]'.
- Session overview:** A table showing 'Session Overview - 29.04.2008 09:09:18' with columns for 'Sensor', 'Channel', and 'Value'. It lists various sensors and their current values.

Red arrows point from labels on the left to the corresponding windows in the screenshot:

- Sensor list
- Agenda list
- Measurement plot
- History window
- Measurement
- Session overview

SOFTWARE REQUIREMENTS

SDB software requires Windows 98™, Windows 2000, Windows NT™, XP, Vista to run. Microsoft Excel™ and Microsoft Access™ are recommended to export the data for further analysis and representation, but are not required to run SDB.

