General
The IB 100 interface box is an interface box for creating a connection between Sencom Smart Sensor and a PC running the SPS24 calibration and maintenance software. The interface box supports the off-line calibration feature SENCOM is known for. By the offline calibration option with SENCOM it offers flexibility and increases process uptime.

A WU11 SENCOM cable connects the sensor to the interface box using a screw terminal. The IB100 box is being connected to a common PC running SPS 24 software through Bluetooth connection.

The SPS24 PC software offers convenient operation using the larger display than the analyzer. The software features:
- Sensor management
- Database viewer and
- Error message display

The analyzer displays a multi-layered menu in abbreviated form, while the SPS24 can display the full text and supplementary information, enabling smooth operation and reducing operation hours.

Working with the data management function and other applications in the PC, the SPS24 can save a large amount of calibration data, and allow editing and outputting of reports. By referring to past data, the SPS24 can automatically estimate the health of the sensor, and thus display the anticipated replacement date.

Features
Convenient and quick connection
Bluetooth connectivity offers smooth and operation friendly connection for efficient performance of sensor maintenance tasks.

Easy-to-use interface
The SPS24 displays sufficient information and makes operation more efficient thanks to the ease of use and flexible display area of the PC.

Trend graphics to show input stabilization
The trend wave form displayed during calibration allows operators to visually recognize when the input becomes stable.

Data management for SENCOM sensors
The SPS24 can maintain previous data of sensors as well as the data of currently connected sensors. With this feature, operators can:
- check past calibration records as well as the latest one
- record and manage calibration work for each operator under the valid user account
- limit access by setting user levels

Migration of sensor data
The setting data of the current sensors can be saved in the PC.

Flexible reporting function
Properties of the sensors which are saved in the PC can be output in PDF or Excel formats. The output parameters are selectable.
Configuration

<On site>

FU20F SENCOM sensor
(single unit can be connected)

FLXA202/FLXA21 2-wire liquid analyzer
(with the SENCOM module)

The SENCOM sensor can save its properties such as calibration data in itself. The sensor is detachable and calibrated either at the site or the laboratory. Example: the calibration data saved on the PC can be used in both the PC and FLEXA.

<At laboratory>

IB100 Interface box

WU11 SENCOM cable
(for digital communications)

SENCOM sensor (up to four units)

Specification of Interface Box

This includes an interface box with bluetooth, a CD with driver and SPS24 software.

Operating Condition

Operating Temperature: -10°C to 50°C
Operating Humidity: 10% to 85% RH
Installation Altitude: 2000m or less
Installation location: Indoors

Storage Condition

Storage Temperature: -30°C to 70°C

Power Supply

Battery: LR6 (AA Alkaline) or HR6 (AA Nickel-metal hydride) ×2 (not included)
Power consumption: 200mW (excl. sensor power supply)
Cont. operation time: 8H

Enclosure

Material: ABS
Degree of protection: IP54 (rating applies when the Cable Assy is conn.)
Connector type: M9 5pin female

Bluetooth Communication

Compliant standard: Bluetooth Ver 2.1+EDR, product is listed under declaration ID D032445
Supported profile: SPP (Serial Port Profile)
Carrier frequency band: 2402 to 2480 MHz
Channel spacing: 1 MHz
Number of channels: 79
Comm. distance: 10m (Class2)

Serial communication

Protocol: MODBUS RTU
Physical Layer: RS485 Half duplex (2 wire)
Baud rate: 9600bps

GS 12B06J09-01E-E
External dimensions

System Requirements

Operating system (OS) : Windows 7 SP1 (32 bit/64 bit)
The operating system language and the software language are either English or Japanese.
PC hardware : Installed with either of the OSs above and equipped with the CPU and memory listed below.
Intel Core 2 Duo CPU E7500 or higher. Minimum 2 GB RAM
Display : XGA (1024×768) or larger
HDD : At least 100 MB for application (more space may be required to save data)
Drive : CD-ROM drive
Number of USB ports : Depends in the number of SENCOM sensors to be connected (1 to 4).
Printer : Units that can operate with either of the Windows systems above

Functional Specifications

Sensor management
Screen for measurement, calibration, etc.
Current measurement readings : Displays measurement readings of the connected sensor
Performance : Displays various information of the connected sensor
Sensor setup : Sets parameters of the connected sensor
Calibration : Performs calibration

Database viewer
Screen for managing various information of the sensors connected currently and in the past
New data : Displays the latest information of the sensor
Calibration history : Displays calibration records of the sensor

Error information
Error information : Displays the current error
Error history : Displays the error records

Setup
RS port number : Sets the RS port number for the interface box to be connected with the PC
Communication log : 
Unit setting : Selects and sets the unit
Display : Selects the date format and customizes the menu bar
Select language : Selects a software language to be displayed
User account : Enables or disables the user account management and sets other relevant parameters
pH/ORP : Sets various parameters common to pH/ORP sensors

Example of screen

Current measurement readings screen (with two FU20F SENCOM sensors connected)

Model & Suffix Codes
This software can be installed on a single computer only. It has a single licence only.

<table>
<thead>
<tr>
<th>Model code</th>
<th>Suffix code</th>
<th>Option code</th>
<th>Description</th>
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<td></td>
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<td>Interface box SENCOM with SPS24 software</td>
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<tr>
<td>Type -AB</td>
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<td>General purpose for EU, USA, JPN and CAN</td>
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Spare part Description

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<tr>
<th>Spare part</th>
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<tr>
<td>WU11-M9-02-CN-V</td>
<td>2m interconnection cable</td>
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