

# USB Sensor Interface for Strain Gauge, Potentiometric and DC/DC Sensors

Model 9205

Code:	9205 E
Manufacturer:	burster
Delivery:	ex stock/1 week
Warranty:	24 months



1 channel In-Line IP65



USB-Multisensor-Interface in table housing

- New inexpensive "plug & measure" design
- Simple connection via PC USB port
- Up to 16-bit resolution
- High-speed measurement of up to 2500 readings/sec.
- Convenient configuration and analysis software DigiVision
- Lab View Drivers

## Application

In the field there is a frequent need to measure sensor readings rapidly and easily right at the sensor and to transfer them directly to a PC without additional amplifiers or converters. The 9205 USB Sensor Interface can satisfy this requirement admirably, thanks to its „plug & measure“ design. The USB connection means installation could not be simpler. With its neat, compact design, the device can be used in almost any application. The practical body construction with screw-fastening allows quick sensor attachment, while IP65 degree of protection means it can be used even in harsh environments.

### Typical applications

- Mobile test measurements via laptop
- Laboratory test set-ups
- Instrumentation and control
- Diagnostic measurements in the chemical industry
- PC-based recording of expansion figures in bio engineering

## Description

The USB Sensor Interface takes its supply from the connected PC via the USB port, and uses it to generate the 4V supply voltage for the sensors. The initial settings and sensor settings are made by burster in-house and saved in the USB Sensor Interface. These can then be fine-tuned by the customer. Software provides display and archiving functions. One USB Sensor Interface can be connected as standard. Each sensor can be tared individually, and measurement curves can be displayed jointly or separately in a graph. We can configure the Interface to suit a specific sensor, although customer-specific parameters can be changed using the free analysis software supplied. This software allows measurement data to be recorded in an Excel file.

## Technical Data

### Connection sensors

#### Strain gauge

Bridge resistance:	350 Ω ... 5 kΩ
Connection system:	4 wire
Sensitivity:	0 ... ± 3 mV/V
Sensor excitation:	4 V
Excitation current:	max. 20 mA
Input resistance:	200 GΩ
Measurement:	< ± 0.05 % F.S.
Temperature coefficient:	10 ppm/ K
Resolution:	16 bit

#### Potentiometer

Connection system:	3 wire
Resistance:	1 kΩ ... 5 kΩ
Sensor excitation:	4 V
Excitation current:	max. 20 mA
Input resistance:	1.3 GΩ
Measurement error:	< ± 0.05 % F.S.
Temperature coefficient:	10 ppm/ K
Resolution:	16 bit

#### Transmitter

Sensor excitation:	4 V / 12 V
Excitation current:	max. 20 / 80 mA
Measurement signal:	± 5 V
Measurement error:	< ± 0.05 % F.S.
Temperature coefficient:	10 ppm/ K
Resolution:	16 bit

#### Temperature\*

Sensors:	Pt 100
Range:	0 ... 300°C
Dimensions (W x H x D):	70 X 60 X 35 [mm]
Output:	0 ... 5 V
Measurement:	0.1 k
	*on request

#### Signal process

A/D transformation:	up to 16 bit
Measuring rate:	up to 200
readings per seconds	

#### In-Line Housing

Material:	Aluminium
Dimensions:	115 x 25 [mm]
Weight:	200 g
Protection class:	IP65
Mounting method:	screw clamp
Power supply:	via USB-plug 4 V ... 6 V
Cable length from sensor to 9205:	max. 3 m
Cable length from PC to 9205:	2 m
Sensor connection:	PG 7 connection
USB connection on 9205:	PG 7 connection

#### Housing

Material:	Plastic
Dimensions:	290 x 210 x 80 [mm]
Protection class:	IP20

Power supply:	5 V with external power supply
Cable length from PC to 9205:	1 m
Sensor connection:	9 pole Sub min D
Software	
System requirement:	Windows 2000, XP, Vista

## Order Information

### In-Line Version

**USB sensor interface for strain gauge sensors**, include with DigiVision 9205-P001 for 1 channel measurement, 2 m cable to the PC **Model 9205-V001**

### In-Line Version

**USB sensor interface for potentiometric or transmitter sensors**, include with DigiVision 9205-P001 for 1 channel measurement, 2 m cable to the PC **Model 9205-V002**

### Order Code

Sensor for tension and compression load, range 1 KN with USB sensor interface **Model 8435-6001**  
**Model 9205-V001**

At the order you must separately specify the sensor Adjustment from the sensor to 9205 **Model 9205-ABG**

### Order Code for desktop case version

**Desktop Case Version**  
9205 in desktop case version, for every channel is possible to use 9205-V003 or 9205-V004. The maximum is 4 channels. **Model 9205-V3xxxx**

**USB sensor interface for strain gauge sensors**, additional board for desktop case version **Model 9205-V003**

**USB sensor interface for potentiometric or transmitter sensors**, additional board for desktop case version **Model 9205-V004**

### An example for ordering a desktop case version

Desktop case version with 2 USB sensor interfaces for strain gauge sensors and 2 USB sensor interfaces for potentiometric and DC/DC sensors. The software DigiVision 9205-P100 is included. **Model 9205-V33344**

Adjustment of a measurement chain **Model 9205-ABG**

## Accessories

Configuration and evaluation software DigiVision for 1 channel measurement and 200 Meas./sec. (in scope of delivery contained) **Model 9205-P001**

Configuration and evaluation software DigiVision for multi channel (up to 8 measurement curves) measurement, up to 2500 meas./sec. possible **Model 9205-P100**

Connecting cable, 12 pin female connector **Model 99540-000C-0090005**

Connecting cable, 9 pin Sub-D female connector **Model 99609-000C-0090005**

## Configuration and evaluation software DigiVision 9205-P100

- Intuitive operation
- Data export in Excel
- Measurement rate up to 2500 meas./sec. (with 9205-P100) for every channel
- Up to 8 measurements on same time

