

9206 EN

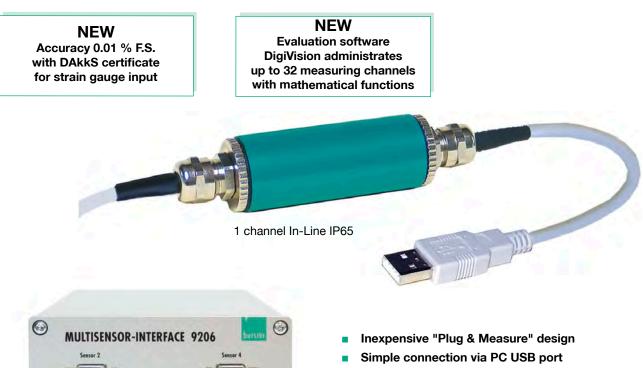
24 months

ex stock/1 week

USB Sensor Interface

For strain gauge, potentiometric, DC/DC and Pt100 sensors

Model 9206



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- 24 bit resolution
- High-speed measurement of up to 1200 readings/sec.
- Convenient configuration and analysis software DigiVision

Code:

Delivery:

Warranty:

- Pt100 as option
- LabVIEW and DLL drivers free of charge
- Integration in customer-owned software
- 6 wire technology for the highest precision

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 9206 USB sensor interface can satisfy this requirement admirably, thanks to its "plug & measure" design. The USB connection means installation could not be simpler.

USB multi sensor interface in housing

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 power supply 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. But a license key enables an open-end expansion. 32 interfaces output curves may be displayed at the same time. 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.

The connection to LabVIEW or the integration into customers' software is enabled by a free driver package.



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Technical Data

Connectable sensors

Connectable sensors	
Strain gauge	
Bridge resistance:	350 Ω 5 kΩ
Connection system:	6 wire
Sensitivity:	0 60 mV/V
Sensor excitation:	2.5 V
Excitation current:	max. 30 mA
Measurement:	< ± 0.05 % F.S.
Potentiometer	
Connection system:	3 wire
Resistance:	1 kΩ 5 kΩ
Measurement signal:	5 V
Sensor excitation:	5 V
Excitation current:	max. 30 mA
Measurement error:	< ± 0.05 % F.S.
Transmitter	
Sensor excitation:	12 V

Excitation current:	80 mA
Measurement signal:	± 10 V
Measurement error:	< ± 0.05 % F.S.
Temperature	

Sensors:	Pt 100
Range:	- 200 + 800 °C
Accuracy:	0.1 K

General amplifier data

Resolution:	24 bit
Measuring rate: up to 1200 readings per second only with software 9206-P	100 or 9206-P200
up to 200 readings per second and 1 measuring channel with 9206-P001	
Input resistance:	> 1 MΩ
Temperature coefficient:	10 ppm/K
Environmental temperature range:	0 + 50 °C
Storage temperature:	- 10 + 70 °C

In-Line housing

Material:	Aluminium
Dimensions:	115 x 25 [mm]
Weight:	200 g
Protection class:	IP67
Mounting method:	screw clamp
Power supply:	via USB-plug 4 V 6 V
Cable length from sensor to 9206:	max. 3 m
Cable length from PC to 9205:	2 m
Sensor connection:	PG 7 connection
USB connection on 9206:	PG 7 connection

Desktop housing

Material:	Aluminium
Dimensions:	210 x 150 x 90 mm
Protection class:	IP20
Power supply:	90 230 VAC / 11 30 VDC
Cable length from PC to 9205:	1 m
Sensor connection:	9 pole Sub min D

Software DigiVision

System requirement:

Windows XP, Vista, Win7

Order Code

USB-Sensor-Interface 9206-	-v X O O >	<
IP65 tube housing	0	
Tube housing with 12 pin connector for sensors	2	
Strain gauge, Poti, DC/DC	1	1
Pt100	2	2
including measurement and analys	is software 9206-P001	

including measurement and analysis software 9206-P001

USB multi sensor interface - in housing

9206-V3	r2 Sensor3 Sensor4
unoccupied	0
Strain gauge, Poti, DC/DC	1
Pt100	2
Option increased measurement ac 0.01 % F.S. incl. DAkkS certificate	

9206-V3xxxx including measurement and analysis software 9206-P200

Order Information

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 Pt100 sensors.

The software DigiVision 9206-P200 is included. Model 9206-V31122

Adjustment of a measurement chain Model 9206-ABG Consisting of sensor and USB sensor interface

Accessories

Configuration and evaluation software DigiVision for 1 channel measurement and 200 measurements/sec. (included in scope of delivery)

Model 9206-P001

Configuration and evaluation software DigiVision for multi-channel (displays up to 32 measurement curves at the same time) and measurement, up to 1200 meas./sec. possible. Measurement results can be offset against each other via freely programmable mathematic measuring channels. Model 9206-P200

Connecting cable, 12 pin female connector one end open for 9206-V000x Model 99540-000C-0090005

Connecting cable, 9 pin Sub-D female connector one end open for 9206-V000x Model 99609-000C-0090005



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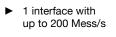
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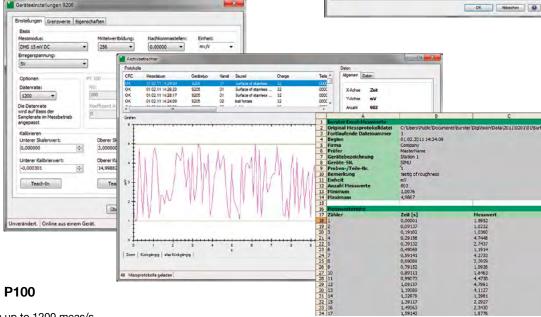
DigiVision Configuration and Analysis Software

General Software Data

- Convenient device finder
- Instrument parameterization
- Instrument data adopted automatically, e.g. scaling, limit settings
- Back-up function for instrument data
- ► Simultaneous display of up to 16 measurement channels
- Different measurement rates can be combined
- Different triggers can be set: global or channel-specific
- Creation of instrument groups
- Report finder for locating group reports and individual reports
- Documenting individual measurement curves with various options e.g. serial number, batch counter, day counter

Software DigiVision P001





Export function to Excel

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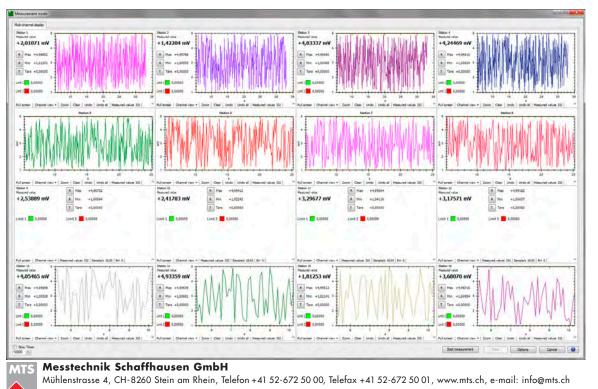
I Part

(PLC etc.) via RS232 or Ethernet

Software DigiVision P100

• max. 16 channels with up to 1200 meas/s

Messen Prüfen Automatisieren www.mts.ch



Software DigiVision 9206-P200 Einstellungen Messbetrieb Intuitive operation ► Grundkonfiguration Kanaleinstellungen Trigger Dokumentation Matematik Ein/Ausgänge Register ► Easy-going configuration the interfaces Engänge Measurement rate up to 1200 meas./sec. ۲ **1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 2 * *** for every channel Gerät / Gerätekanal Löschen Belegen Stationsname SIMU (0 SIMU) Up to 32 measurements at the same time Gerätetyp 9205 Kanal-Nr. 1 Konfiguration ► Storage of measurement protocols Data export in Excel ► Ausoange 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 2 1 Free mathematical measuring channels ► Aktiv V Grundrechen Arter Name g Einheit Nachkommastellen 0.0 . (11+12*13+14)+10 Formel Menü Messbetrieb Mehrkanaldarstellung Grundrechen Arten 60 Gleitender Mitty ert 13.6 +28,0 g 40 +13,134 1/min 13.2 12.8 AM 20 Abbrechen R Max +13,382 R Max +44,4 R Min +12,575 ****** R Min +13,3 22 23 24 25 26 27 28 23 24 25 26 27 Vollbild | Kanalansicht 🕶 | Zoom | Leeren | Rückgängig | alles Rückgängig | Messwerte Vollbild Kanalansicht - Zoom Leeren Rückgängig alles Rückgängig Messwerte Gleitender Median Differenz beider Mittelwerta al: 14.0 -10,5 13,5 and the second states +13,243 +10,108 10,3 13.0 10.1 R Max +13,778 12.5 R Max +10.522 12.0 9,9 R Min +12,366 R Min +10,000 23 24 25 26 27 28 29 30 23 24 25 26 27 28 30 29 Ibild | Kana Vollbild | Kanalansicht 🕶 | Zoom | Leeren | Rückgängig | alles Rückgängig | M lansicht + Zoom Leeren Rückgängig alles Rückgängig Me Sinus eins Zählers nus eins Zählers um 90 grad 1,5 📲 -3.5 --4.5 0,5 -5,519 -0,855 -0,5 -5.5 R Max -4,000 R Max +1,000 1.5 Hundredundandundundundunde -6.5 1.1.1 R Min -6,000 R Min -1,000 22 23 24 25 26 27 28 29 30 22 23 24 25 26 27 28 29 30 31 3 en Rückgängig Vollbild | Kanalansicht - Zoom | Leeren | Rückgängig | alles Rückgängig | M 2 -2 24 25 26 27 28 21 22 23 29 Vollbild | Kanalansicht + | Zoom | Leeren | Rückgängig | alles Rückgängig | Mes Messstopp [F8] Drucken Optionen Abbrechen mazahl mit doppeiter Genau doppeter Gen IEEERemainder(xy) Gibt den Rest der Division zweier angegebener Zahlen zurück (x/y) Engänge Max(x1,x2) Min(x1,x2) Gibt die größere von zwei Gleitkommazahlen x1 und x2 mit doppelter Genauigket zurück. Gibt die kleinere von zwei Gleitkommazahlen x1 und x2 mit doppelter Genauigkeit zurück. Ausgänge Recister Zähler Pow(x.y) Potenziert eine angegebene Zahl x mit dem angegebenen Exponenten y. Round(xy) Rundet einen Gleitko mawert x mit doppelter Genauigkeit auf eine angeg Beispiel Beschreibung Beispiel Formel (11+12*13+14)+10 Validie Ok

Typical Applications

9206 EN - 4

- Differential measurements
- Averaging of the measurement results
- Determination of efficiency in engine test

- Determine mass moment of inertia
- Determine the frictional force
- Comparison of different measurement readings

OK Abbrechen



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