novasina
The Art of Precision Measurement

General Catalogue DP

2016

Differential pressure and air velocity measurement instruments

for

Clean rooms

Micro environments

Laminar flow systems

Filter monitoring

HVAC applications

www.novasina.com

Doc. 005225.00

Table of contents

Pascal-ST/Z membrane differential pressure measurement instruments

Thanks to an outstanding sensor technology, optimised measurement electronic, software and an **integrated automatic zero-point calibration**, these instruments excel with their extremely accurate and stable readings.

Various software functions for adjustment, password protection, measurement filters and intervals, scalable outputs as well as alarm settings emphasise the versatility of this instrument. Its application areas are consequently vast and it is ideal for demanding   controls.

For the first time ever a membrane differential pressure instrument offers such outstanding performances at such competitive prices!

Main features:

Measurement ranges	:0...+50 Pa / 0...+200 Pa	*(unidirectional)*
Measurement accuracy	: 50 Pa : +/- 0.3%	*(of the full scale)*
at 20°C	200 PA : +/- 0.1%	*(of the full scale)*
Hysteresis	: +/- 0.15 Pa	*(over the full scale)*
Typical offset drift	: +/- 0.15 Pa	*(automatic zero-point calibration)*
Configuration	: PascalTool-WIN SW *(Win98/NT/2000/XP/Vista/Windows7)*	

> **Advanced notice! Available as from Q2-2016 NEW bidirectional measurement ranges: -25..+25 Pa / -100…+100 Pa**

Differential pressure measuring system
Pascal-ST/Z membrane transmitters

The Pascal-*ST/Z* differential pressure measuring devices are precision instruments for monitoring and controlling pressure differences of gaseous media in low ranges. The measurement principle is based on the static differential pressure detection with a silicon membrane.

Beside a high robustness and accuracy this devices offer an easy and intuitive handling and start up. The zero calibration is performed automatically and so the instrument is ready for use immediately after its installation.

All other configurations can be done using the user friendly **Pascal***Tool***-WIN** software (from version V 4.11). The software can be downloaded for free from the Novasina homepage and installed on a local personal computer (Windows).

For more information please visit our homepage.

www.novasina.com

Applications:
- **clean rooms, mini environments, clean room air locks**
- **laminar flow boxes**
- **air filter monitoring**
- **air velocity in ducts with pitot tubes**
- **leak detection systems**
- **isolators**

Technical data:

Dimensions:	68 x 119 x 29 mm
Weight:	ca. 160 g
Meas. ranges:	0...+50 Pa 0...+200 Pa
Max. resolution:	0.1 Pa *(50-series)* 0.1 Pa *(200-series)*
Meas. accuracy:	50: +/- 0.3% *(of full scale)* 200:+/- 0.1% *(of full scale)*
Temperature effect:	50 : < 0.01 Pa /°C 200 : < 0.03 Pa /°C
Hysteresis:	+/- 0.15 Pa *(const. Temp.)*
Offset-Drift:	+/- 0.15 Pa *(auto zero)*
Max. overpressure:	+/- 20'000 Pa
Operating temp.:	5...45°C
Power supply:	10.5... 35 VDC
Protection:	IP 54 / EMC
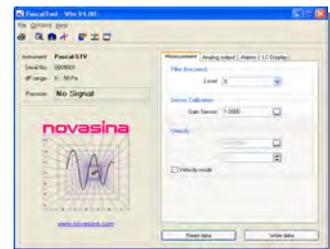
Configuration with PascalTool-WIN:
can be easily performed with a PC
Windows 95, 98, NT, 2000, XP, Vista,
Windows 7

Pascal-ST/Z MEMBRANE product line

Pascal-STS 50 Z

260 0036 Pascal STS 50 Z

Measurement instrument for monitoring and alarm for differential pressures in low ranges of 0 to +50 Pa (unidirectional). The measurement principle is based on a silicon membrane for static measurement. The installation is a closed system (no air mass flow). The exceeding or under-running of the **freely selectable alarm levels** are displayed by integrated LED. Two galvanic separated, corresponding to the LED, relays can be used for an external alarm installation.

Technical data:
- Measurement range: 0 ... 50 Pa
- 2 selectable thresholds red/green LED indicators
- 2 relays (close/make contact)
- Configuration by Pascal*Tool*-WIN software
- Power supply: 10.5 ... 35 VDC
- Power consumption max. 2.5 W
- Relays contacts: 2 x 48V, 2 A
- Weight: 320 gr

Pascal-STS 200 Z

260 0040 Pascal STS 200 Z

Measurement instrument for monitoring and alarm for differential pressures in low ranges of 0 to +200 Pa (unidirectional). The measurement principle is based on a silicon membrane for static measurement. The installation is a closed system (no air mass flow). The exceeding or under-running of the **freely selectable alarm levels** are displayed by integrated LED. Two galvanic separated, corresponding to the LED, relays can be used for an external alarm installation.

Technical data:
- Measurement range: 0 ... 200 Pa
- 2 selectable thresholds red/green LED indicators
- 2 relays (close/make contact)
- Configuration by Pascal*Tool*-WIN software
- Power supply: 10.5 ... 35 VDC
- Power consumption max. 2.5 W
- Relays contacts: 2 x 48V, 2 A
- Weight: 320 gr

Pascal-STVS 50 Z

260 0037 Pascal STVS 50 Z

Same instrument with alarm functions as the Pascal-STS 50 Z, with additional integrated LC-Display though. The display can be set to different units using the configuration software.

The device can also measure and display, by converting the differential pressure, the air velocity value. This setting can be done by the Pascal*Tool* WIN software.

Technical data:
- Measurement range: 0 ... 50 Pa
- 2 selectable thresholds red/green LED indicators
- 2 relays (close/make contact)
- Configuration by Pascal*Tool*-WIN software
- Display: LCD Dot Matrix
- Power supply: 10.5 ... 35 VDC
- Power consumption max. 2.5 W
- Relays contacts: 2 x 48V, 2 A
- Weight: 320 gr

Pascal-STVS 200 Z

260 0041 Pascal STVS 200 Z

Same instrument with alarm functions as the Pascal-STS 200 Z, with additional integrated LC-Display though. The display can be set to different units using the configuration software.

The device can also measure and display, by converting the differential pressure, the air velocity value. This setting can be done by the Pascal*Tool* WIN software.

Technical data:
- Measurement range: 0 ... 200 Pa
- 2 selectable thresholds red/green LED indicators
- 2 relays (close/make contact)
- Configuration by PascalTool-WIN software
- Display: LCD Dot Matrix
- Power supply: 10.5 ... 35 VDC
- Power consumption max. 2.5 W
- Relays contacts: 2 x 48V, 2 A
- Weight: 320 gr

Pascal-STVS 25 ZB

260 1245 Pascal STVS 25 ZB

NEW *- bidirectional measurement -25…+25 Pa. available as from Q2-2016*

Technical data:
- *Measurement range: -25..+25Pa*

Pascal-STVS 100 ZB

260 1246 Pascal STVS 100ZB

NEW *- bidirectional measurement -100…+100 Pa. available as from Q2-2016*

Technical data:
- *Measurement range: -100..+100Pa*

Pascal-STD 50 Z

260 0034 Pascal STD 50 Z

Measurement instrument for monitoring and alarm for differential pressures in low ranges of 0 to +50 Pa (unidirectional). The measurement principle is based on a silicon membrane for static measurement. The installation is thus a closed system (no air mass flow). The measured value goes on for controlling or data collection on a configurable **analogue output** (U: 0/2...10V, I: 0/4...20 mA). The exceeding or under-running of the free selectable alarm levels are displayed by integrated LED.

Technical data:
- Measurement range: 0 ... 50 Pa
- Output: analogue output
  U : 0/2...10VDC (max.500 Ohm)
  I : 0/4...20mA (max.500 Ohm)
  freely scalable & adjustable
- Configuration by Pascal*Tool*-WIN software
- Power supply: 10.5 ... 35 VDC
- Power consumption max. 2.5 W
- Weight: 320 gr

Pascal-STD 200 Z

260 0038 Pascal STD 200 Z

Measurement instrument for monitoring and alarm for differential pressures in low ranges of 0 to +200 Pa (unidirectional). The measurement principle is based on a silicon membrane for static measurement. The installation is thus a closed system (no air mass flow). The measured value goes for controlling or data collection on a configurable **analogue output** (U: 0/2...10V, I: 0/4...20 mA). The exceeding or under-running of the free selectable alarm levels are displayed by integrated LED.

Technical data:
- Measurement range: 0 ... 200 Pa
- Output: analogue output
  U : 0/2...10VDC (max.500 Ohm)
  I : 0/4...20mA (max.500 Ohm)
  freely scalable & adjustable
- Configuration by Pascal*Tool*-WIN software
- Power supply: 10.5 ... 35 VDC
- Power consumption max. 2.5 W
- Weight: 320 gr

Pascal-STD 25 ZB

260 1243 Pascal STD 25 ZB

NEW - bidirectional measurement -25…+25 Pa. available as from Q2-2016

Technical data:
- *Measurement range: -25..+25Pa*

Pascal-STD 100 ZB

260 1244 Pascal STD 100ZB

NEW - bidirectional measurement -100…+100 Pa. available as from Q2-2016

Technical data:
- *Measurement range: -100..+100Pa*

Pascal-STV 50 Z

260 0035 Pascal STV 50 Z

Measurement instrument for monitoring and alarm for differential pressures in low ranges of 0 to +50 Pa (unidirectional). The measurement principle is based on a silicon membrane for static measurement. The installation is thus a closed system (no air mass flow). The measured value is displayed on a Dot Matrix LC-Display. This value goes for controlling or data collection on a configurable **analogue output** (U: 0/2...10V, I: 0/4...20 mA). The exceeding or under-running of the free selectable alarm levels are displayed by integrated LED.

Technical data:
- Measurement range: 0 ... 50 Pa
- Output: analogue output
  U : 0/2...10VDC (max.500 Ohm)
  I : 0/4...20mA (max.500 Ohm)
  freely scalable & adjustable
- Configuration by Pascal*Tool*-WIN software
- Display: LCD Dot Matrix
- Power supply: 10.5 ... 35 VDC
- Power consumption max. 2.5 W
- Weight: 320 gr

Pascal-STV 200 Z

260 0039 Pascal STV 200 Z

Measurement instrument for monitoring and alarm for differential pressures in low ranges of 0 to +200 Pa (unidirectional). The measurement principle is based on a silicon membrane for static measurement. The installation is thus a closed system (no air mass flow). The measured value is displayed on a Dot Matrix LC-Display. This value goes for controlling or data collection on a configurable **analogue output** (U: 0/2...10V, I: 0/4...20 mA). The exceeding or under-running of the free selectable alarm levels are displayed by integrated LED.

Technical data:
- Measurement range: 0 ... 200 Pa
- Output: analogue output
  U : 0/2...10VDC (max.500 Ohm)
  I : 0/4...20mA (max.500 Ohm)
  freely scalable & adjustable
- Configuration by Pascal*Tool*-WIN software
- Display: LCD Dot Matrix
- Power supply: 10.5 ... 35 VDC
- Power consumption max. 2.5 W
- Weight: 320 gr

Pascal-STV 25 ZB

260 1241 *Pascal STV 25 ZB*

NEW - bidirectional measurement -25…+25 Pa. available as from Q2-2016

Technical data:
- *Measurement range: -25..+25Pa*

Pascal-STV 100 ZB

260 1242 *Pascal STV 100ZB*

NEW - bidirectional measurement -100…+100 Pa. available as from Q2-2016

Technical data:
- *Measurement range: -100..+100Pa*

Accessories

Pascal*Tool*-WIN
Configuration program for Windows

Configuration program Pascal*Tool*-WIN for instrument set-up and calibration

->Delivered on a CD.

111 6848 Software

Requirements:

Windows PC with CD drive

Windows 95 / NT / 2000 / XP / Vista / Windows 7

Usable with Pascal STS, STVS, STD, STV / Z

External power supply

External power supply, for voltage range 100 to 240 VAC with exchangeable plugs EU/US/JP.

From the secondary side this power supply can be connected directly to all Pascal ST/Z types.

252 4210 power supply EU/US/JP

Technical data:
- Primary side (plug):
- Voltage range: 100 ... 240VAC
- EU/US/JP plug
- Secondary side (open end cable) :
- Voltage: 24V DC +/- 5%
- Cable ends unshielded and ready for connection.
- Weight: 90 gr

Programming cable to PC (DB9)

Programming cable for connecting a PC to all *Pascal-ST/Z types.*

111 6849 Cable PC

Composed of:
- Cable length: 1,5 m
- Special stereo plug on Pascal
- D-Sub 9 plug on the PC side
- Weight: 95g

PC/Laptop converter USB-RS232
to PC/Laptop for COM applications

For Laptops without D-Sub RS232 interface to convert a USB to RS-232 signal. For Windows, MAC or Linux systems.

Such converters are also available in computer shops.

111 9415 USB-RS-232 converter

USB to RS-232 converter:
- Cable length : 100 cm
- Weight   : 50 g
- Connector   : D Sub-9 (COM Port)
- Socket   : USB connector

Cable supplied incl. driver software

Factory calibration
at 3 measurement points

Factory calibration and check on a checking station under standard conditions including appropriate documents und certificates.

111 7603 Certificate

Factory calibration including certificate at 3 measurement points.

The tests are done by a calibrated and certified reference differential pressure gauge.

Customer specific configuration

On demand, specific configurations can be defined as factory settings.

All requested parameters must be provided in advance in a specially prepared Excel spread sheet form.

The Excel-based form should be filled in by the end-user to ensure accurate configuration.

111 6074 Configuration

Protection plug white

Protection plus for RS-232 front socket. Colour, white.

Available for all *Pascal* models **as spare part**

Attention: This protection plug is made of silicone!

111 7038 plug **white**

Technical data:
Material: plastic / FPM
Dimensions: ø 8/3.5 x 10
Colour: white
Weight: 0.5 gr

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The Art of Precision Measurement

PascalMaxx membrane differential pressure measurements instruments

for clean rooms and HVAC applications

Differential pressure measurement, made easy!

The *PascalMaxx*, a measurement instrument for pressure ranges up to 2000 Pa, which is typically used in HVAC (Heating, Ventilation, Air Conditioning) or clean room applications (50 Pa version), is provided with the most modern technology. Thanks to the high quality membrane sensor, optimised measurement electronics and **integrated automatic zero-point calibration** this device is able to measure pressure differences at high levels with best accuracy, repeatability and stability.

Various functions, which can be chosen and set by the front keypad buttons make this system extremely versatile and adaptive. For each application, even the most specific, this instrument can be configured and integrated perfectly.

Main features:

Measurement ranges	:	-50..+50 Pa / 0...+500 Pa / 0...+2000 Pa
Measurement accuracy	:	+/-50 Pa : +/-0.5% *(of the full scale)*
at +20°C		500 Pa : +/-0.25% *(of the full scale)*
		2'000 Pa: +/- 0.5% *(of the full scale)*
Offset drift	:	< 2 Pa / year *(automatic zero calibration)*
Configuration	:	by keypad buttons

Differential pressure measuring system PascalMaxx

Accurate, fast, versatile, adaptive, robust, stable, cost efficient

With the new PascalMaxx, Novasina widens its product line. After the HygroMaxx for rel. humidity and temperature measurement Novasina launches now the new differential pressure measurement instrument for ranges up to 2'000 Pa.

The PascalMaxx outstands by its versatility and easy operability. A real added value is offered by the **integrated fully automatic zero-point calibration system**, which is adjusting drifts continuously and makes the measurement device stable and insensitive to mounting position.

Other features:

- scalable analogue output U/I
- relay contact for alarm threshold
- setting of contact status of relay (NO / NC)
- possibility of a 2 point control
- password protection system
- 2 point calibration capability (zero and gain)
- big, clear readable LCDisplay

Applications:
- **Clean room pressure control**
- **HVAC filter and fan belt monitoring**
- **HVAC flap controls**
- **air flow in ducts with pitot tube**
- **leak detection systems**

Technical data:

Dimensions:	110x118x50 mm
Weight:	approx. 200 g
Meas. ranges:	-50…+50 Pa
	0... +500 Pa
	0...+2000 Pa
Max. resolution:	0.1 Pa *(50 / 500 Pa range)*
	1 Pa *(2000 Pa range)*
Meas. accuracy:	50: +/-0.5% *(of full scale)*
at +20°C over	500: +/-0.25% *(of full scale)*
full meas. range	2000: +/-0.5% *(of full scale)*
Temperature effect:	50 : +/- 2% of m.v / °C
	500 : +/- 1% of m.v / °C
	2000 : +/- 1% of m.v./ °C
Offset-Drift :	< 2 Pa / year with automatic zero calibration
Max. overpressure:	50 : +/- 25'000 Pa
	500 : +/- 25'000 Pa
	2000 : +/- 50'000 Pa
Operating temp.:	0...50°C
Power supply:	19.2 ... 28.8 VDC
Protection:	IP 41 / EMC

*Pascal*Maxx

PascalMaxx 50 Z (bidirectional)

Measurement instrument for monitoring and controlling the differential pressure in rooms. Measurement range -50 to +50 Pa **(bidirectional)**. The measurement principle is based on a piezo-resistive silicon membrane. Together with the analogue signal output U/I this instrument is provided with an integrated 230V relay, whose contact thresholds can be freely set by the device keypad buttons. The big, clear LCDisplay facilitates the reading of the measurement values.

260 0955
PascalMaxx 50 Z

Technical data:
- Measurement range:-50..+50 Pa
- 1 adjustable threshold
- 1 analogue output U/I

- Power supply: 19.2 ... 28.8 VDC
- Power consumption max. 2 Watt

- Relay: 230V, 2 A
- Weight: approx. 200 gr

PascalMaxx 500 Z

Measurement instrument for monitoring and controlling the differential pressure in HVAC applications. Measurement range 0 to +500 Pa **(unidirectional)**. The measurement principle is based on a piezo-resistive silicon membrane. Together with the analogue signal output U/I this instrument is provided with an integrated 230V relay, whose contact thresholds can be freely set by the device keypad buttons. The big, clear LCDisplay facilitates the reading of the measurement values.

260 0091
PascalMaxx 500 Z

Technical data:
- Measurement range: 0 ... 500 Pa
- 1 adjustable threshold
- 1 analogue output U/I

- Power supply: 24V DC $\pm$ 25%
- Power consumption max. 2.5 Watt

- Relay: 230V, 2 A
- Weight: approx. 200 gr

PascalMaxx 2000 Z

Measurement instrument for monitoring and controlling the differential pressure in HVAC applications. Measurement range 0 to +2000 Pa **(unidirectional)**. The measurement principle is based on a piezo-resistive silicon membrane. Together with the analogue signal output U/I this instrument is provided with an integrated 230V relay, whose contact thresholds can be freely set by the device keypad buttons. The big, clear LCDisplay facilitates the reading of the measurement values.

260 0083
PascalMaxx 2000 Z

Technical data:
- Measurement range: 0..2'000 Pa
- 1 adjustable threshold
- 1 analogue output U/I

- Power supply: 24V DC $\pm$ 25%
- Power consumption max. 2.5 Watt

- Relay: 230V, 2 A
- Weight: approx. 200 gr

Accessories

External power supply

External power supply, for voltage range 100 to 240 VAC with exchangeable plugs EU/US/JP.

From the secondary side this power supply can be connected directly to all PascalMaxx types.

252 4210
power supply EU/US/JP

Technical data:
- Primary side (plug):
- Voltage range: 100 ... 240VAC
- EU/US/JP plug
- Secondary side (open end cable) :
- Voltage: 24V DC +/- 5%
- Cable ends unshielded and ready for connection.
- Weight: 90 gr

Factory calibration
at 3 measurement points

Factory calibration and check on a checking station under standard conditions including appropriate documents und certificates.

111 7603 Certificate

Factory calibration including certificate at 3 measurement points.

The tests are done by a calibrated and certified reference differential pressure gauge.

Spare plug set to Pascal*Maxx*

Spare plug set for **Pascal*Maxx*** PCB, for power supply, analogue outputs and relay.

260 0096
Spare plug set

Composed of:

Plug	: 2 pole power supply
	3 pole relay
	4 pole analogue output
Weight	: total 20 g

Filter set

Protection filter for applications with high pollution.

The filter hoses can be connected with the connectors and the main hoses to the instrument nozzles.

260 0097 Filter set

Composed of:

- 2 pcs hose with filter

- 2 pcs Ø4 / Ø4 mm
  hose connector

- 2 pcs Ø4 / Ø6 mm
  hose connector

![novasina — The Art of Precision Measurement]

CaliBox 200
mobile dP calibrator

Portable differential pressure calibrator and reference measurement instrument

This new differential pressure generator and reference instrument has been designed for laboratories as well as for mobile use in clean rooms. Thanks to its **rechargeable battery** the device can be operated up to 48 hours independent from any external power source.

At the push of a button, the generator becomes a real reference measurement device, if required also available with accredited certificate. The internal sensor operates with high accuracy and long term stability, which is achieved with a combination of a high quality sensor element and a fully automated zeroing system. This makes the instrument not just accurate but also maintenance free!

But the CaliBox 200 offers more! Its steady and **stable pressure generation** allows a calibration of **static** membrane **and dynamic** mass flow sensors. Hence this all-rounder can be used for most of the differential pressure measurement technologies. Other strengths are the mechanical and pressure robustness.

Main features:

Pres. Range:	**0...200 Pa** (uni-directional)	*Generator / Measurement*
Accuracy :	typical +/-0.15 Pa (0.08% FS)	
Mobility :	rechargeable battery 25.6V/10 *Ah* *(48h autonomy)*	
Versatility :	can be used for membrane & mass flow sensor technology	
Simplicity :	configuration by buttons & PascalTool WIN software	

CaliBox 200
Mobile calibrator for dP sensor calibration & adjustment

Flexible, accurate, fast, versatile, adaptive, robust, stable, cost efficient

This cost efficient CaliBox 200 is an universal solution suits perfectly for every calibration professional, who wants to calibrate on site.

The CaliBox 200 is delivered inside a robust carrying case including all accessories such as hoses, tools, PC software etc. The differential pressure is set by a precision control button and is lead via a hose to the test specimen. During this process the pressure is always kept stable at the same level with no need to always build up the pressure. This permits to calibrate efficiently several specimens in series.

The robust carrying case protects the inner life of the CaliBox 200 and an integrated valve system protects the sensor from overload pressure. In addition the CaliBox 200 provides a scalable and adjustable analogue output, which can be used to connect external devices such as data loggers, PC, laptops etc.

For more information please visit our homepage.
www.novasina.com

Applications:
- **on site pressure generation**
- **on site pressure reference device**
- **calibration laboratory instrument (with accreditation)**
- **on site calibrator for dP sensor calibration (range 0 to 200 Pa)**

Technical data:

Dimensions:	360 x 304 x 194 mm
Weight:	approx. 7.30 kg
Meas. ranges:	0...+200 Pa
Max. resolution:	0.01 Pa
Meas. accuracy: at +20°C	typical <= 0.15 Pa 0.08% *(of full scale)*
Temperature effect:	<= 0.03 Pa /°C +/- 0.015% *(of full scale)*
Offset-Drift :	<= 0.15 Pa / year *(automatic zero-point cal.)*
Hysteresis :	typical 0.15 Pa / year
Max. overpressure:	-100... 500 kPa
Operating temp.:	0...50°C *(not condensing)*
Storage temp. :	-10…+60 °C
Power supply:	AC : 100…260 VAC DC : LiFePo4 battery 25.6V / 10 Ah
Charging time :	< 3 hours
Operation time :	> 24…48 hours
Analogue Out :	0/2…10V (max. load 10k)
Digital interface:	RS-232
Protection open :	IP 30
Protection close :	IP 54

Mobile differential pressure calibrator

CaliBox 200

Mobile, battery powered differential pressure generator and reference instrument to calibrate static (membrane) and dynamic (mass flow) differential pressure sensors within range of 0 to +200 Pa. A robust carrying case protects the internal dP sensor and air generator. The instrument delivered with a factory certificate (certificate with accreditation as option).

Included:
- Battery charger 100…260 VAC incl. power cable
- 4 / 5 / 8 mm tubes 2m length and nozzle
- 2 x 4 mm hoses, length 2m
- RS-232 interface cable for connection with PC
- CD with *Pascal*Tool WIN for PC
- Operation manual

260 0538 *Cali*Box 200

Technical data:
- Dimensions: 360x304x194 mm
- Weight: approx. 7.30 kg
- Power AC : 100…260 VAC
  DC : LiFePo4 battery 25.6V / 10 Ah
- Meas. range: 0...+200 Pa
- accuracy: typ. <= 0.15 Pa
  at +20°C 0.08%
  (of full scale)

for more details please see page 15

Spare Parts

Power supply 90...260V Charger

External battery charger for the internal LiFePo4 battery (25.6V / 10Ah) with main plug power input from 100…360 VAC
50/60 Hz

260 0643 Battery charger

Technical data:
Weight: approx. 7.30 kg
Dimensions: 135 x 90 x 50 mm

Input : 90 ... 260VAC
Euro plug
Output : 29.2 VDC / 3A

Charging time : < 3 hours

Programming cable to PC (DB9)

Programming cable for connecting a PC to a *Cali*Box 200.

111 6849 Cable PC

Composed of:
- Cable length: 1,5 m
- Special stereo plug on Pascal
- D-Sub 9 plug on the PC side
- Weight: 95g

PC/Laptop converter USB-RS232

to PC/Laptop for COM applications
For Laptops without D-Sub RS-232 interface to convert a USB to RS-232 signal. For Windows, MAC or Linux systems.

Such converters are also available in computer shops.

111 9415
USB-RS-232 converter

USB to RS-232 converter:
- Cable length : 100 cm
- Weight : 50 g
- Connector : D Sub-9 (COM Port)
- Socket : USB connector

Cable supplied incl. driver software

PascalTool-WIN

Configuration program for Windows

Configuration program PascalTool-WIN for instrument set-up and calibration

111 6848 Software

->Delivered on a CD.

Requirements:

Windows PC with CD drive

Windows 95 / NT / 2000 / XP / Vista / Windows 7

Connecting nozzle straight

Straight connecting diameter changing nozzle from 6 mm to hose with inner diameter 8 mm (standard hose diameter for Novasina Pascal gauges).

111 6332 Nozzle straight

Technical data:
- Material: Plastic / FPM
- Diam. reduction from 8 to 6 mm
- Fixable with a cable clamp
- Dimensions: ø 10/8/5 x 12 mm
- Weight : 1g

SCS calibration

at 11 measurement points

Instrument calibration by an accredited laboratory including all needed documentation and certificates.

Note:
Novasina collaborates with the Swiss SCS accreditation organisation, which is compatible with all major international accredited institutes of metrology.

on demand
SCS calibration

Technical data:

SCS calibration including certificate at 11 measurement points.

Calibration and documentation is done by an accredited Swiss laboratory

# CIC-Touch external display for clean rooms

This multi display for clean room air parameters such as air humidity, temperature, differential pressure and particles allows to check at a glance the actual climatic parameters in clean rooms. The online data are provided by external sensors and/or contact relays. Besides the actual measurement value, which is shown with the respective unit (e.g. temperature, humidity etc.) and measurement location, also the backlight colour changes according to the actual status. Green colour for values within the threshold and red colour if the threshold is exceeded.

The CIC-Touch display can be easily mounted in clean room walls without the need of any screws. The unit can be placed in a wall cavity, snapped in and fixed with clips, which are part of the display unit itself. Thanks to the consequent clean room suitable design, the installation depth is very low and hence the unit fits in all current clean room walls. The smooth front panel complies with the demands of clean room design, easy to be cleaned and no edges subject to pollution.

Another highlight of the CIC-Touch is the connectivity such as analogue/digital interfaces, contact relays, Ethernet, USB, Modbus, RS-232, RS-485 and a SD card. The CIC-Touch can be easily connected to any external sensor and also integrated in existing monitoring systems. The configuration is performed via the intuitive operation and configuration menu.

The CIC-Touch can also be factory configured for specific OEM applications.
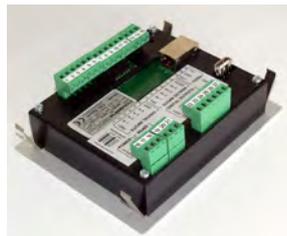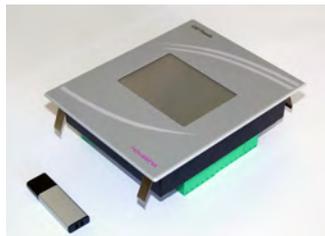
Applications:
- **Clean rooms**
- **Isolators**
- **Laminar flow benches**
- **Operating rooms**
- **Laboratories, calibration rooms**
- **Specific OEM solutions**

Industries:
- **Semiconductor**
- **Pharmaceutical**
- **Hospitals**
- **OEM**

Your advantages:
- Semi-flush with the wall, no sharp edges, front panel only 2 mm thickness
- Easy to clean, flat and smooth surfaces
- Low installation depth and ideal for integration in all current clean room walls
- Snap-in mounting without any screws
- Display of up to 4 parameters at the same time
- Status display with status backlight colour
- Easy configuration by intuitive menu
- Several integrated communication interfaces

CIC-Touch touchscreen display

Recommended ambient sensors to be connected:

Differential pressure:
- Pascal-ST/Z
- PascalMaxx

Air humidity and temperature:
- QuantaDat / nSens
- HygroMaxx and TempMaxx

Remark: CIC-Touch is an universal display and any sensor can be connected, it can also be used for installation in existing sensor networks.

260 0941 CIC-Touch display

Specifications:

Display:	graphical display 3,5" TFT display 70x52mm
Panel:	150 x 120 mm (H2O2 res.)
Mounting dimension:	H 127 x W 107 x D 50mm. incl. connectors
Power supply:	24 V AC/DC
Inputs:	4 x digital inputs 4 x analogue inputs
Outputs:	2 x relay contacts 230V
Digital interfaces:	Ethernet Modbus (RS-485)
USB:	standard PC compatible

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Instrument	Parameter	Industry	Applications	Main features
PascalMaxx 50/ 500/ 2000 Z	dP (diff.press)	• Pharmaceutical • Textile • Chemical • Medical • Hospitals • Semiconductor	• Clean room pressure control • HVAC installations • Filter saturation monitoring • Fan belt monitoring • Air speed control • Air locks	• Good accuracy • Big clear display • 1 scalable analogue output • 1 relay contact • Automatic zero-point calibration • Calibration 2 dP points • Integrated dust particle filter • Intuitive menu structure • Password protection
Pascal-ST 50 / 200 Z	dP (diff.press)	• Pharmaceutical • Semiconductor • Chemical • Medical • Health Care • Power Plants	• Clean room control • Filter saturation monitoring • Fan belt monitoring • Air speed control • Air locks • Specific OEM applications	• High accuracy for clean rooms applications • 1 scalable/adjustable AO (STV/STD model) • 2 relay contacts (STS and STVS model) • Automatic zero-point calibration • Calibration 2 dP points • Integrated dust particle filter • Calibration by Windows Pascal*Tool* WIN • Password protection
CaliBox 200	dP (diff.press) Calibrator & reference instrument	• Pharmaceutical • Semiconductor • Chemical • Medical • Health Care	• On-site calibration in clean rooms • Calibration in cal. laboratories • Use as reference instrument (also available with certificate)	• Highest accuracy and stability • High versatility for mass flow & static instruments • 2 in one - calibrator and reference instrument • Integrated auto-zero calibration • Integrated dust particle filter • Scalable / adjustable analogue output • High performance battery 48 hours capacity • Robust carrying case
CIC-Touch	Universal touchscreen display	• Pharmaceutical • Semiconductor • Chemical • Medical • Health Care • Hospitals	• Clean rooms • Isolators • Laminar flow benches • Operating rooms • Laboratories, calibration rooms • Specific OEM solutions	• Semi-flush mounting • Easy to clean, flat and smooth surfaces • Low installation depth • Snap-in mounting without any screws • Display of 4 parameters • Status display with status backlight colour • Easy configuration • Several integrated communication interfaces