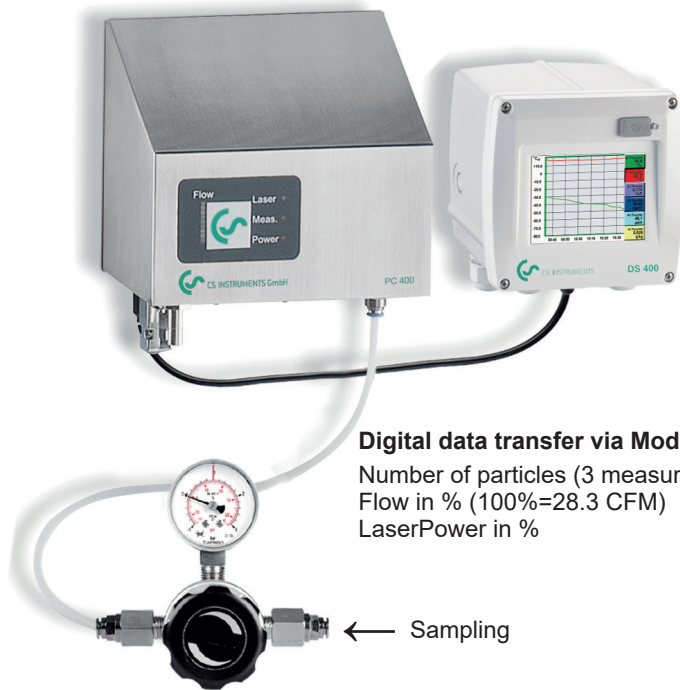




Particle counter PC 400 and DS 400



Digital data transfer via Modbus-RTU:
 Number of particles (3 measuring channels)
 Flow in % (100%=28.3 CFM)
 LaserPower in %

← Sampling

The DS 400 shows all 3 measuring channels according to ISO 8573-1

Particle size 0.1...0.5 µm: Number of particles per CF

Particle size 0.5...1.0 µm: Number of particles per CF

Particle size 1.0...5.0 µm: Number of particles per CF

A1a	PC 400	0.1-0.5µ	1458 cts/m ³
A1b	PC 400	0.5-1.0µ	246 cts/m ³
A1c	PC 400	1.0-5.0µ	8 cts/m ³
Home [Icon] Setup Alarm Lg.stop 10.01.2012 22:34:33 1 days, ...			

Advantages at a glance:

- Highly precise, optical laser particle counter for use in compressed air and technical gases
- Highly precise optics for detecting the smallest particles up to 0.1 µm and therefore suitable for monitoring the compressed air class 1 according to ISO 8573-1
- The flow rate of (1 CFM) is 10 times higher than that of the particle counters generally available on the market. Advantage: Counts the smallest particles with high counting accuracy at the same time
- Due to the digital data transfer (Modbus-RTU) to the chart recorders DS 400 or DS 500, 3 measuring channels can be transferred at the same time (without any faults due to checksum)
- The class 1 filter which is included in the scope of delivery can be used for on-site calibration at any time. Contaminations on the optics can therefore be quickly detected or eliminated.

Advantages of the DS 400

- Data logger for long-term monitoring
- Display shows trend curves (online and history curves available)
- Zoom function directly on the touch screen
- Integrated Ethernet interface (Modbus/TCP) and RS 485 interface (Modbus-RTU) for data transfer to superordinate controls
- 2 alarm relays (changeover contact 230 VAC, 3A) – threshold values freely adjustable
- Easy operation via 3.5" touchscreen

TECHNICAL DATA PC 400

Measured medium:	Compressed air (free from aggressive, corrosive, acid, toxic, flammable and oxidising components) as well as gas types like N ₂ , O ₂ , CO ₂ . Further gas types on request
Field of application:	In case of compressed air after filtration In case of gases / pure gases also without filtration
Parameter:	Number of particles per CF (relative to expanded air: 68°F, 1000 hPa) Size channels for the PC 400 0.1 µm: Particle size 0.1...0.5 µm: Number of particles per m ³ Particle size 0.5...1.0 µm: Number of particles per m ³ Particle size 1.0...5.0 µm: Number of particles per m ³ Size channels for the PC 400 0.3 µm: Particle size 0.3...0.5 µm: Number of particles per m ³ Particle size 0.5...1.0 µm: Number of particles per m ³ Particle size 1.0...5.0 µm: Number of particles per m ³
Operating pressure:	Max. input pressure on the pressure reducer: 580 psi
Humidity of measured gas:	<= 90% rel. humidity, pressure dew point max. 50 °F, non-condensable humidity
Ambient temperature:	41...104 °F
Temperature of the measured medium:	0...104 °F
Compressed air connection:	0.24 inch PTFE-hose incl. quick coupling
Flow rate:	1 cfm
Interface:	RS 485 (Modbus-RTU)
Light source:	Laser diode
Power supply:	24 VDC, 300 mA
Dimensions:	5.9 x 7.8 x 11.8 inch
Weight:	17.64 lbs
Housing:	Stainless steel



Stationary solution with particle counter PC 400 and DS 400



DESCRIPTION	ORDER NO.
PC 400 particle counter up to 0.1 µm for compressed air and gases, incl. pressure reducer and calibration certificate	0699 0040
Connection cable for probes 16 ft, with open ends	0553 0108
DS 400 chart recorder with graphic display and touch screen operation	0500 4000 D
Option:	
Integrated data logger for 100 million measured values	Z500 4002
Integrated Ethernet and RS 485 interface	Z500 4004
CS Basic - data evaluation in graphic and table form - readout of the measured data via USB or Ethernet. License for 2 working places	0554 8040
As an alternative to PC 400 up to 0.1 µm:	
PC 400 particle counter up to 0.3 µm for compressed air and gases, incl. pressure reducer and calibration certificate	0699 0041

Mobile solution with particle counter PC 400 in a service case and DS 500 mobile



DESCRIPTION	ORDER NO.
PC 400 particle counter up to 0.1 µm for compressed air and gases incl. pressure reducer and calibration certificate in a service case	0699 0042
Connection cable to portable devices, ODU/ M12, 16 ft	0553 1503
Chart recorder DS 500 mobile, 4 sensor inputs	0500 5012
CS Basic - data evaluation in graphic and table form - readout of the measured data via USB or Ethernet. License for 2 working places	0554 8040
As an alternative to PC 400 up to 0.1 µm:	
PC 400 particle counter up to 0.3 µm for compressed air and gases incl. pressure reducer and calibration certificate in a service case	0699 0043

Re-calibration and accessories particle counter PC 400

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Werkkalibrierprotokoll Nr. CS_8888_89-2017

Gegenstand: DL - CHECK
Ölstrom/Messgröße

Hersteller: BERNI TECHNOLOGIES GMBH

Reihen-Nr.: 1382208

Auftraggeber: CS Instruments GmbH
Zustandsweg Straße 15
76535 Vöckern

Auftragsnummer: 71201

Ort der Kalibrierung: Neuss

Datum der Kalibrierung: 12.05.2017

Anzahl der Seiten: 5

Wir erklären hiermit, dass das oben genannte Produkt unter Beachtung und Einhaltung eines vollen Qualitätsmanagementsystems nach dem internationalen Qualitätsstandard DIN EN ISO 9001:2008 geprüft und kalibriert wurde.

Für die Kalibrierung verwendeten Messanordnungen werden regelmäßig geprüft und kalibriert. Alle erforderlichen Messdaten sind auf den nachfolgenden Seiten dieses Kalibrierprotokolls enthalten.

Für die Einhaltung einer angemessenen Frist zur Wiederholung der Kalibrierung ist der Anwender verantwortlich.

Dieses Kalibrierprotokoll darf nur vollständig und unverändert weiterverbreitet werden. Auszüge oder Änderungen bedürfen der Genehmigung des Ausstellers. Kopierprotokolle ohne Unterschrift haben keine Gültigkeit.

Datum: 24.05.2017

Leiter Produktion: [Signature]

Beauftragter: [Signature]

DESCRIPTION	ORDER NO.
Re-calibration particle counter PC 400 incl. certificate	0699 3304
CS Service Software incl. PC connection set for PC 400	0554 2009
Certificate for "As found" data for NIST traceability	9999 3304
Certificate for "As found" data for NIST traceability	9999 3304
EASY1 Swap Program to eliminate downtime	on request
EASY2 Loaner Program for time of calibration to eliminate downtime and allow serial number traceability	on request