Nano-ID® NPC10

NanoParticle Counter

The Nano-ID NPC10 is the first Condensation Particle Counter specifically developed for ultra-clean manufacturing environments. This instrument combines 10 nm sensitivity with high sample flow rate and the lowest zero count specification on the market.

The Nano-ID NPC10 provides single-particle-detection for the cleanest manufacturing and testing applications, and uses the shortest time intervals in the industry to obtain statistically valid measurements.

Designed for plug-and-play operation, the unit is ready to sample aerosol particles in minutes. Set up is simply applying power and connecting the input and output sample lines.

All of the user-selectable variables are configured through the touchscreen display. The color display provides graphical trending of particle contamination. Data is automatically saved to the onboard memory and can be exported via ModBus TCP/IP or USB port.

The proprietary non-hazardous working fluid is superior to isopropyl alcohol, n-butyl alcohol, and water-based condensation particle counters. The fluid provides long use between refills, no odors, and a sample reservoir that captures and recycles most of the working fluid.

The Nano-ID NPC10 is suitable for use in ISO Class 1 through Class 3 environments.

PARTICLE MEASURING SYSTEMS®
pmeasuring.com

Without measurement there is no control

BENEFITS

Continuous and Unattended Operation

- Working fluid reservoir only needs fluid replenished at about 2,000 hours of use

Working Fluid

- Does not use n-butyl or isopropyl alcohol
- No special handling and storage requirements as are associated with alcohol-base fluids

Data Storage

- Internal memory can store one year of data

Pump

- Quiet pump provides regulated sample flow

FEATURES

- 10 nm sensitivity
- 2.83 LPM sample flow rate
- Up to 2,000 hours continuous run time
- Large color IR touchscreen display
- Data export via ModBus TCP/IP and USB
- Sample high-pressure gases using an optional high-pressure diffuser

APPLICATIONS

Semiconductor

- Point-of-use monitoring troubleshooting

Disk Drive

- 2.83 LPM flow rate does not disrupt air flow and 10 nm sensitivity provides essential data for hard disk manufacturing

Quality Control

- Manufacturing quality control of ultra-fine nanoparticles size distribution during synthesis

Air Quality Monitoring

- Detection of airborne ultra-fine and nanoparticles in workplaces and other sensitive environments

Exposure Monitoring

- Risk assessment of exposure to airborne nanoobjects and exposure-dose relationships

Nano-ID® NPC10

NanoParticle Counter

Specifications

Size range	10 - 1000 nm
Aerosol flow rate	2.83 LPM (0.1 CFM ± 5%)
Sampling period	10 to 300 seconds, user-selectable
Max. particle concentration	10^5 / L
Instrument warm-up time	5 minutes nominal at 72 °F (22 °C) ambient
Working fluid	Proprietary non-hazardous organic compound
Working fluid consumption and instrument volume	2000 hours betwen refills Reservoir has a volume of 20 ml when full.
Laser classification	Class 1, complies with US 21 CFR 1040.10 and EN60825-1. An enclosed, internal Class 3B laser is used per EN60825-1.
Data storage	> 1000 days of continuous sampling
Dimensions (l,w,h)	11.8 x 13 x 10.2 in (30 x 33 x 26 cm)
Weight	13.2 lb (6 kg)
Power	100 - 240 VAC, 1.5 A, 50/60 Hz
Data output	USB flash drive and ModBus TCP/IP
User interface	Color front-mounted touchscreen Optional USB mouse (not supplied)
Temperature range	59 - 82 °F (15 - 28 °C)
Humidity range	10 - 90% RH, non-condensing
Operating pressure	1 atm (ambient)
Maximum altitude	6562 ft (2000 m)
Use	Indoor use only
Warranty	1 year

HEADQUARTERS

5475 Airport Blvd
Boulder, Colorado 80301 USA
T: +1 303 443 7100, +1 800 238 1801

Instrument Service & Support
T: +1 800 557 6363
Customer Response Center
T: +1 877 475 3317
E: info@pmeasuring.com

GLOBAL OFFICES

BRAZIL
T: +55 11 5188 8227
E: pmsbrazil@pmeasuring.com

CHINA
T: +86 21 6113 3600
E: pmschina@pmeasuring.com

FRANCE
T: +33 (0)6 82 99 17 98
E: pmsfrance@pmeasuring.com

GERMANY
T: +49 6151 6671 632
E: pmsgermany@pmeasuring.com

ITALY
T: +39 06 9053 0130
E: pmssrl@pmeasuring.com

JAPAN
T: +81 3 5298 8175
E: pmsjapan@pmeasuring.com

KOREA
T: +82 31 286 5790
E: pmskorea@pmeasuring.com

MEXICO
T: +52 55 2271 5106
E: pmsmexico@pmeasuring.com

NORDIC
T: +45 707 028 55
E: pmsnordic@pmeasuring.com

PUERTO RICO
T: +1 787 718 9096
E: pmspuertorico@pmeasuring.com

SINGAPORE
T: +65 6496 0330
E: pmssingapore@pmeasuring.com

SWITZERLAND
T: +41 71 987 01 01
E: info@cas.ch

TAIWAN
T: 886-3-5525300 Ext: 301
E: pmstaiwan@pmeasuring.com

UNITED KINGDOM
T: +44 1684 581 000
E: pmsemea@pmeasuring.com

PARTICLE MEASURING SYSTEMS®

2016.06