In-Line Particle Sensor™ (IPS)

NEW

24/7 detection of small particles in gas and vacuum lines.

Based on our WaferSense® Airborne Particle Sensor™ technology, IPS utilizes a high power blue laser to quickly monitor, identify and enable troubleshooting of particles down to 0.1µm within gas and vacuum line locations for process sensitive applications.

Speed equipment qualification with real-time 24/7 monitoring.
– Collect and display particle data using IPS and new CyberSpectrum™ software for real-time equipment diagnostics.
– Compare past and present data as well as one tool to another easier and faster with CyberSpectrum.
– Save time by swiftly locating contamination sources. See the effect of cleanings, adjustments and r epairs in real time.

Shorten equipment maintenance cycles with inline particle sensing.
– Detect particles in real-time and correlate measurements with tool events.
– Develop a baseline performance for tool and process.
– Simplify maintenance cycles by selectively servicing portions of a tool causing particle generation.

– **Lower equipment expenses with objective and reproducible data.**
– Reduce the need, cost and complexity of particle adder testing that requires usage of test wafers and masks.
– Receive early warning for impending equipment failures and optimize your preventative maintenance plans.

Install IPS in multiple line locations for a variety of applications.
– Versatile particle sensing for any application that is process sensitive to particles including semiconductor processing equipment, EUV chambers, vacuum chambers, 3D metal printing equipment, equipment in controlled environments and more.

Semiconductor fabs and OEMs worldwide value the accuracy, precision and versatility of CyberOptics semiconductor measurement devices. The most efficient and effective measurement devices for tool optimization, stabilization and standardization.
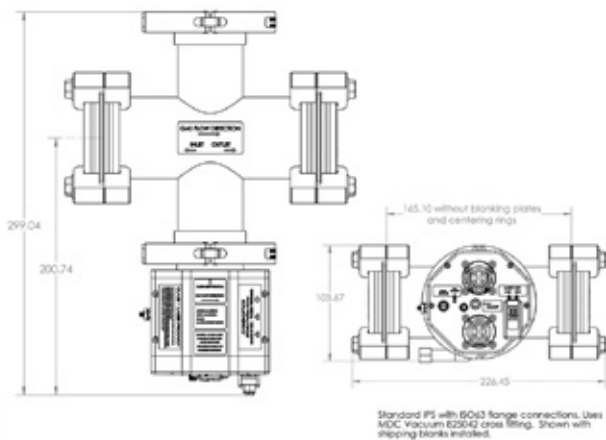
Save Time. Save Expense. Improve Yields.

Nordson
TEST & INSPECTION

CYBEROPTICS®

Features

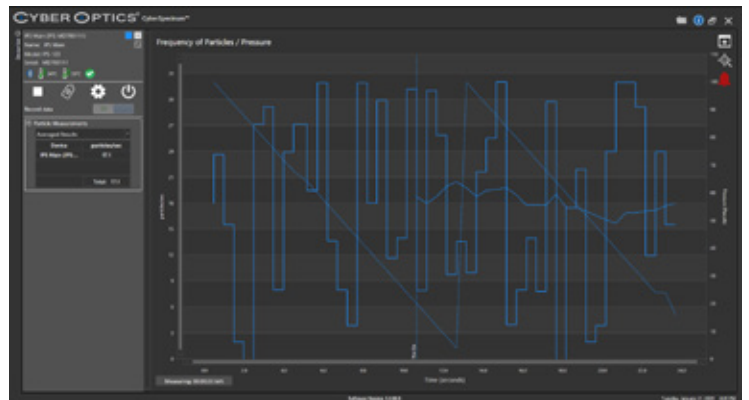|	
Mechanical Interface	ISO-63 flange (standard configuration)
Easy-to-use software	CyberSpectrum software included.
	CyberSpectrum: Displays real-time numeric and visual feedback, cumulative or differential counting modes and particle frequency. Review functionality integrated; replays log file data for review and analysis
Highly accurate	Measures particles greater than 0.1μm
	Less than 5 false counts per hour
Vacuum Exposed Materials	Aluminum, Glass, Viton O-Rings, Stainless steel hardware
Vacuum Integrity	Less than 10^{-6} atm-l/sec leak rate
Operating Pressure*	PN: 8027544: < 10^{-6} to 250 Torr PN: 8029580: < 10^{-6} to 1520 Torr
Operating Temperature	15 deg C to 45 deg C
Operating Humidity	20-90% RH, non-condensing
Laser	Certified to Laser Class 1
Input Voltage	12 VDC
IPS Link	Bluetooth, Class 1, 2.4GHz
Operating Systems	Windows 10
Product Components	Sensor head, stainless cross fitting, clamps, power supply, Bluetooth communications link module

Ships with blank flanges on vacuum ports. Consult factory for installation instructions.

*PN: 8027544 - standard configuration, PN: 8029580 - standard configuration for higher atmospheric pressure operations

Dimensions (mm)

299.04
200.74
103.67
226.45
165.10 without blanking plates and centering rings

Standard IPS with ISO63 flange connections. Uses MDC Vacuum 825042 cross fitting. Shown with shipping blanks installed.

CyberSpectrum™

Real-time data.

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Contact CyberOptics today for more information
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