

Particle Sensor Safety Cabinet

Ambient Temperature Applications



The Particle Measuring Systems® Particle Sensor Safety Cabinet provides chemical containment and safe operating conditions for the Chem 20™ and UltraChem® 40 or 100 chemical particle counting sensors. The cabinet is designed to sit on a shelf or other flat surface.

The cabinet enclosure houses the chemical particle sensor, detects chemical leaks with an external alarm, and provides secondary containment when a leak occurs. In the event of a chemical leak within the chemical particle counter or sample connections, the system will automatically detect the leak, shut off inlet and outlet sample valves, turn off power to the particle sensor, and provide an external alarm contact.

BENEFITS

- Provides safe containment of the chemical particle sensor
- Auto detection of chemical leak with alarms
- Enables safety shut-off of chemical sample lines during alarm conditions

FEATURES

- Secondary containment, polypropylene construction
- Intended for sampling of ambient temperature process chemicals between 15 to 40 °C
- Liquid leak detector
- Safety cut-off switch
- External leak alarm light with external contact closure allows leak alarm communication to external systems
- Inlet and outlet sample shut-off valves
- PFA Bubble Separator to remove large bubbles
- Clear top access door with door interlock
- Controlled power supply to the chemical particle counter
- Two pairs of side-mounted handles

APPLICATIONS

Particle monitoring of:

- Chemical distribution systems
- Semiconductor process tools
- High-purity chemical packaging plants

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Specifications

Cabinet Materials of Construction	Polypropylene
Sample Temperature	15 – 40 °C (59 – 104 °F)
Power	100 to 240 VAC, 50 – 60 Hz, 3 A
Sample Inlet Tubes	¼" PFA, inlet and outlet
Sample Tube Outer Containment	¾-inch FNPT, inlet and outlet
Exhaust	30 – 50 cfm, 2-inch threaded female connection
Drain Connection (in case of leak)	½-inch FNPT
Clean Dry Air	> 5 cfm, 30 psi, ½-inch FNPT
Environment	18 – 28 °C (64 – 82 °F), Humidity < 60%, non-condensing
Alarm Indicator	Dome Light (G/R), external alarm connection available
External Dimensions (L x W x H)	39 x 28 x 15 in (99 x 71 x 38 cm)



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