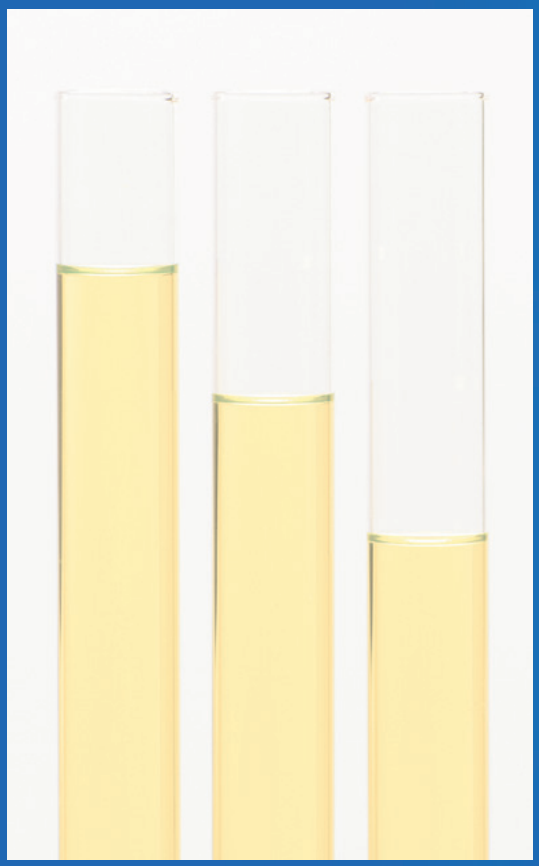
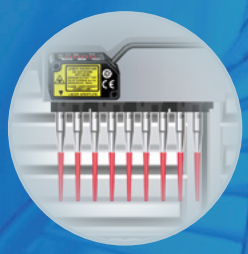
Panasonic
INDUSTRY

Sensors & Ionizer Solutions Catalog

For Laboratory Automation

We offer a variety of products that can be applied to clinical diagnostics & liquid handling instrument.



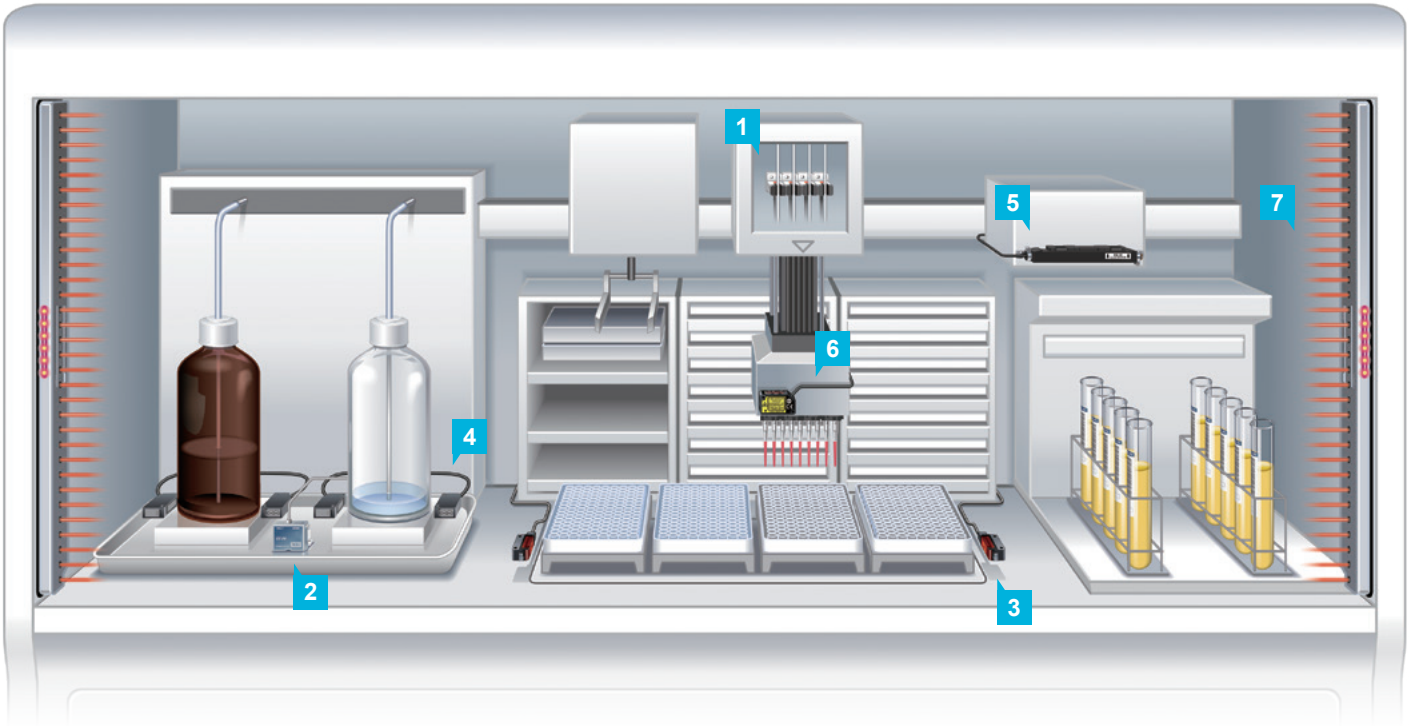


2024.3

For Laboratory Automation

Our many years of advanced technology and know-how in the Factory Automation (FA) industry have led to a wide range of applications.

Panasonic Industry sensors can be integrated with clinical diagnostics & liquid handling instrument, contributing to laboratory automation.



1 Detecting Liquid or Air in a Tube

Optical Bubble Sensor (For small diameter tubes)

Amplifier Built-in

BE-A Series

Air (bubbles)/Liquid can be detected simply by mounting the sensor onto the ø2 / ø3 / ø4 mm ø0.078 / ø0.125 / ø0.156 in tube. Also ideal to detect when reagent or washing liquid runs out.

[Related Products]

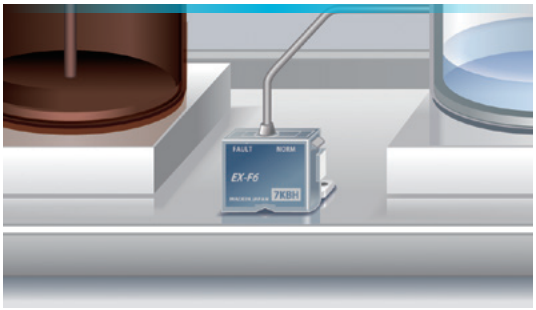
Pipe-mountable Liquid Level Detection Sensor

Amplifier Built-in

EX-F1

Mountable on the ø6 to ø13 mm ø0.236 to ø0.512 in transparent pipe.

2 Leak Detection



Leak Sensor

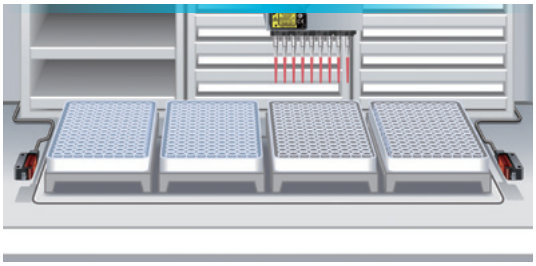
Amplifier Built-in

EX-F60 Series

Even small liquid leaks can be detected simply by connecting the sensor. No sensitivity adjustment required. This compact and space-saving sensor can also be used in narrow spaces.

* For a list of liquids which can be detected, please contact us.

3 Work Positioning



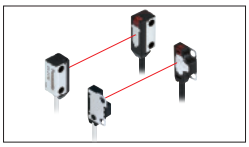
Ultra-compact Laser Sensor

Amplifier Built-in

EX-L200 Series

Distinctive features of these lasers include their high degree of directionality and visibility. Ultra-compact in size, yet provides high-precision detection performance. Ideal for positioning microplates.

[Related Products]

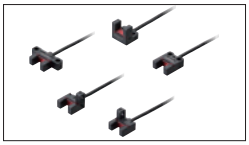


Ultra-minute Photoelectric Sensor

Amplifier Built-in

EX-Z Series

This ultra-slim photoelectric sensor (only 3 mm 0.118 in in thickness) can be mounted in a very small space. Ideal for detection in test tube racks.

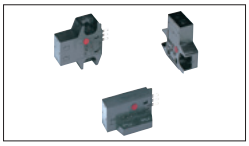


Ultra-small, U-shaped Micro Photoelectric Sensor

Amplifier Built-in

PM-25 Series

Resin-filled structure helps prevent malfunctions caused by vibrations and impacts. Ideal for detection of overrun and starting points in operating units.



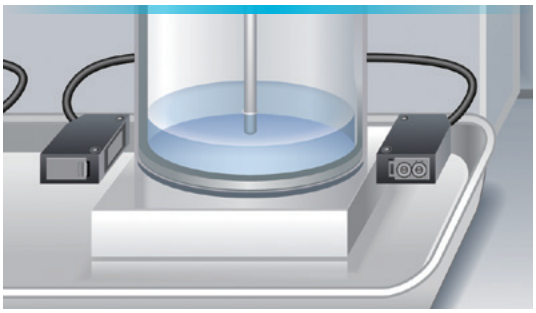
Convergent Reflective Micro Photoelectric Sensor

Amplifier Built-in

PM2 Series

Even a specular background does not affect the sensing performance if the sensor is located 30 mm 1.181 in away from it.

4 Liquid Empty Detection



Optical Reagent Level Detector

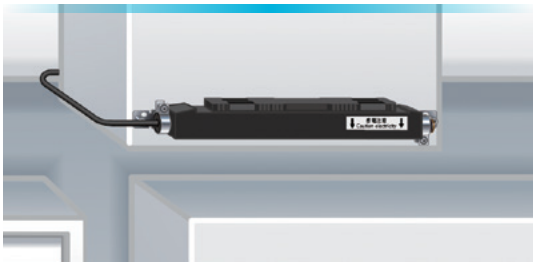
Amplifier Built-in

BE-R Series *

This optical sensor can detect liquid level in safety.
There are no malfunction caused by crystallization and no trouble caused by corrosion.

* This is a special order item.
For more information, please email us at:
Europe: biomedical@eu.panasonic.com
North America: biomedical@us.panasonic.com

5 Static Charge Removal from Test Tubes and Microplates



Area Ionizer

Pulse AC Method

ER-X Series

This airless operating ionizer can remove static charge from the target object without worry of volatilization of valuable reagents or dispersion of contaminants.

[Related Products]

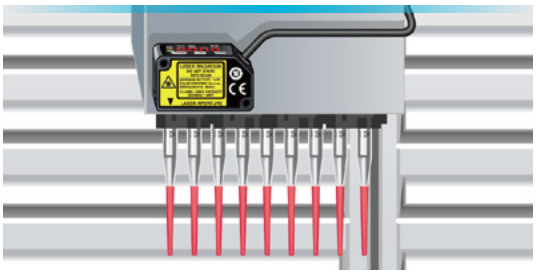
Fan Type Ionizer

High-frequency AC Method

ER-F Series

This unit features a compact shape and requires no compressed air. Low-volume fan type available for use in eliminating static electricity in a process handling thin film or the like.

6 Control of the Dispenser Nozzle Height



Micro Laser Distance Sensor

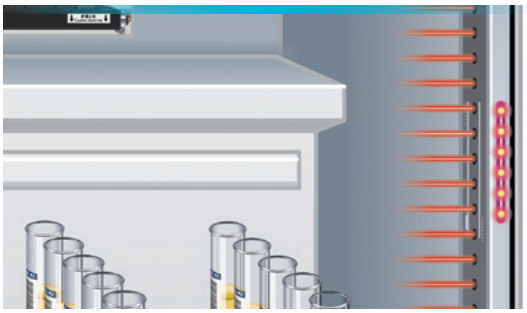
CMOS Type

HG-C Series

Reliable detection in repeatability 10 µm 0.394 mil. This industry's smallest* sensor is also ideal for built-in installation.

* As of February 2024, in-company survey.

7 Operator Safety Measures



Ultra-slim Safety Light Curtain

Category 4 PLe SIL3

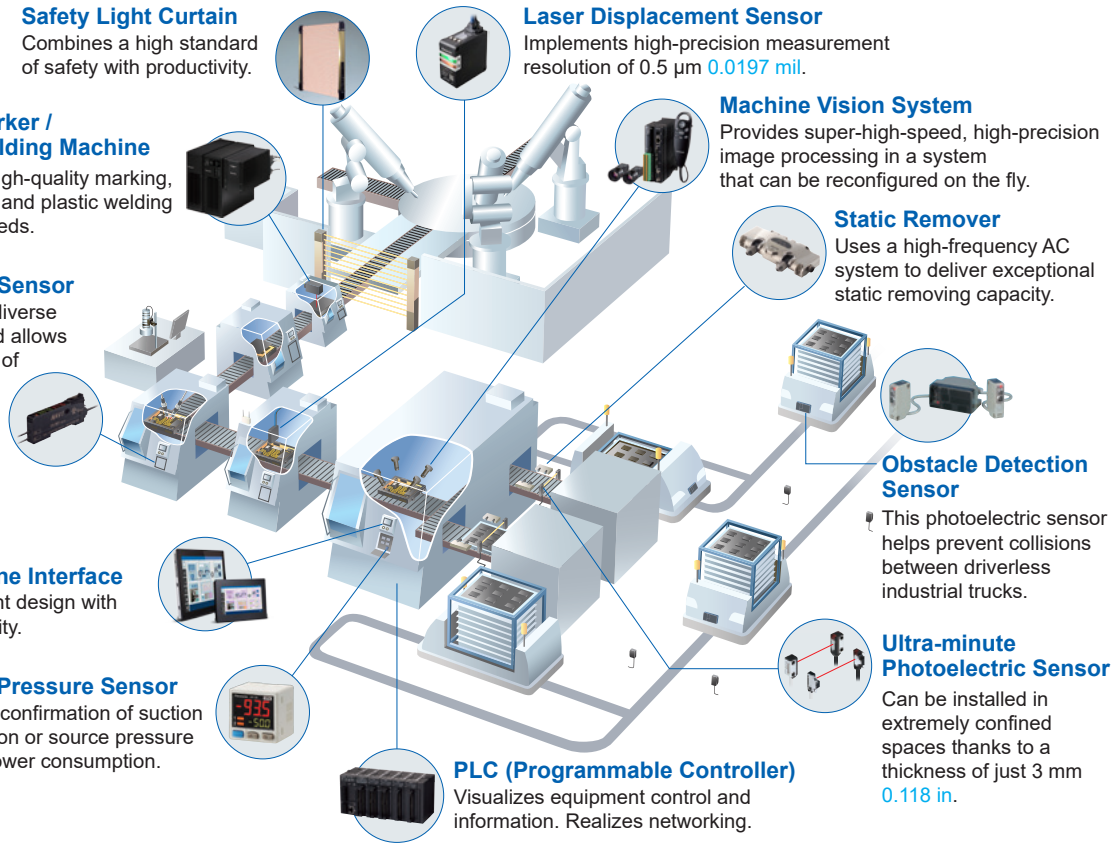
SF4C Series

Safety light curtain ensures safety by automatically stopping a machine whenever a part of body is detected. The slim design (thickness 13 mm 0.512 in) provides a wide machine opening and improved workability.

At Panasonic Industry, we strive to build a brighter future by creating new values that have never existed before, with the support of our customers.

With the comprehensive strength obtained from our sensing, laser and image processing technologies, high speed laboratory automation with greater efficiency can be achieved. And, our integrated controller/web-server technology allows one to view the control status of the controller and collected information via an electronic tablet or computer over an Internet browser. By monitoring the condition of the equipment, maintenance performance can be improved.

Products Contributing to Automation



Safety Light Curtain
Combines a high standard of safety with productivity.

Laser Displacement Sensor
Implements high-precision measurement resolution of 0.5 µm 0.0197 mil.

Laser Marker / Laser Welding Machine
Achieves high-quality marking, processing and plastic welding at high speeds.

Machine Vision System
Provides super-high-speed, high-precision image processing in a system that can be reconfigured on the fly.

Static Remover
Uses a high-frequency AC system to deliver exceptional static removing capacity.

Digital Fiber Sensor
Equipped with diverse functionality and allows standardization of maintenance procedures based on numerical data management.

Obstacle Detection Sensor
This photoelectric sensor helps prevent collisions between driverless industrial trucks.

Human Machine Interface
Combines elegant design with superior operability.

Ultra-minute Photoelectric Sensor
Can be installed in extremely confined spaces thanks to a thickness of just 3 mm 0.118 in.

Digital Pressure Sensor
Enables confirmation of suction completion or source pressure at low power consumption.

PLC (Programmable Controller)
Visualizes equipment control and information. Realizes networking.

●If you have any question about our products, please contact us by E-mail.
Europe: biomedical@eu.panasonic.com
North America: biomedical@us.panasonic.com

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Specifications are subject to change without notice.
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