

# Panasonic

Sensors & Ionizer Solutions Catalog

# For Laboratory Automation

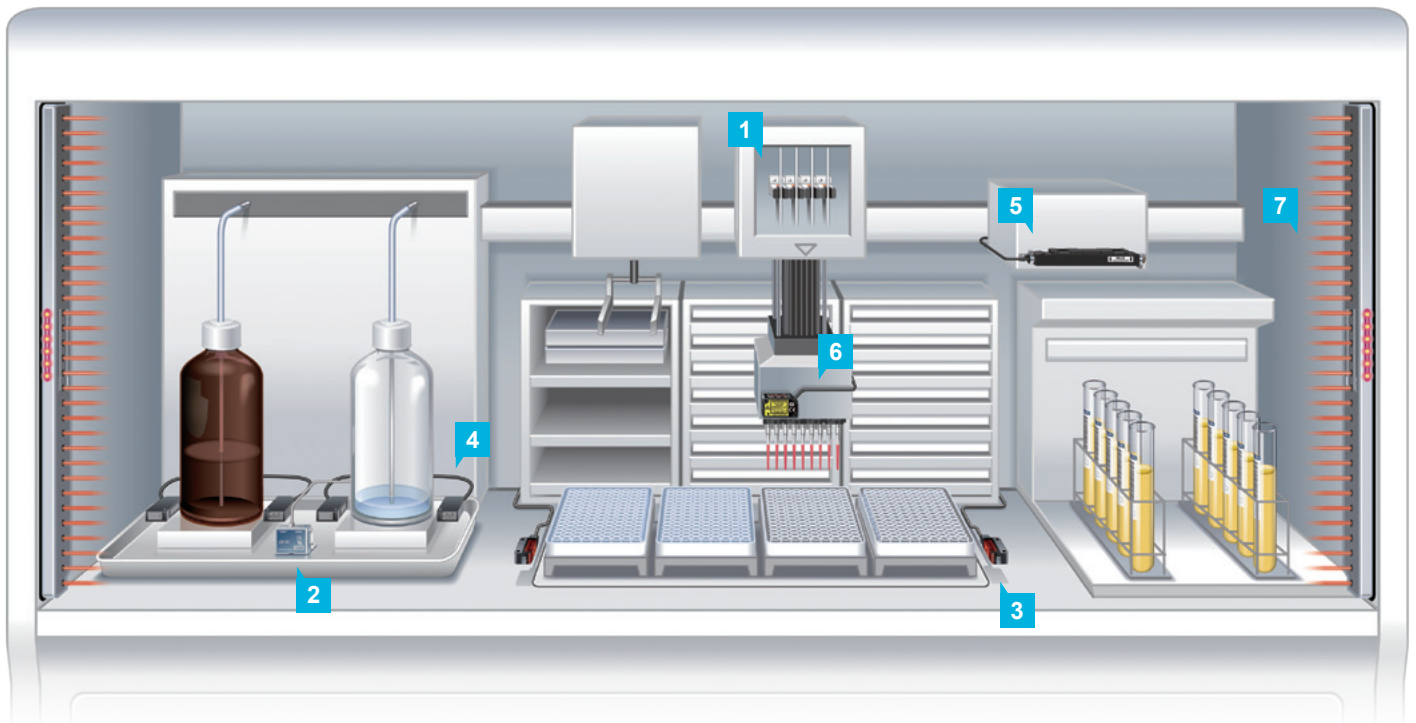
We offer a variety of products that can be applied to clinical diagnostics & liquid handling instrument.



# 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 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  $\varnothing 2 / \varnothing 3 / \varnothing 4$  mm  $\varnothing 0.078 / \varnothing 0.125 / \varnothing 0.156$  in tube. Also ideal to detect when reagent or washing liquid runs out.

[\[Related Products\]](#)

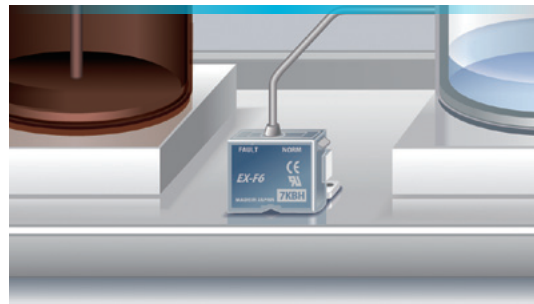
**Pipe-mountable Liquid Level Detection Sensor**

**Amplifier Built-in**

### EX-F1

Mountable on the  $\varnothing 6$  to  $\varnothing 13$  mm  $\varnothing 0.236$  to  $\varnothing 0.512$  in transparent pipe.

## 2 Leak Detection



**Leak Sensor**

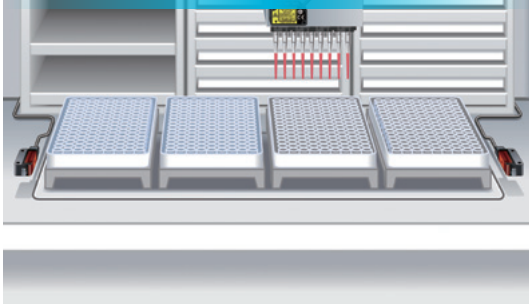
**Amplifier Built-in**

### 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



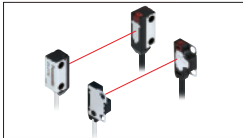
#### Ultra-compact Laser Sensor

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]

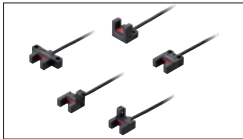


#### Ultra-minute Photoelectric Sensor

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.



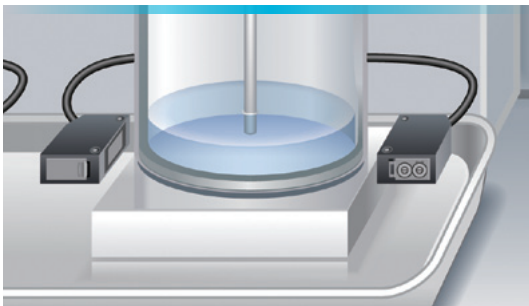
#### Convergent Reflective Micro Photoelectric Sensor

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 \* **NEW**

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



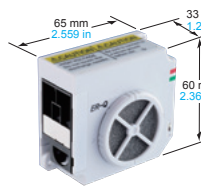
#### Area Ionizer

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]



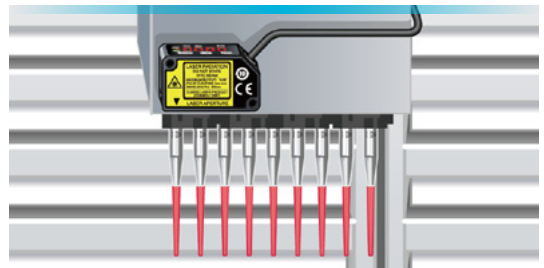
#### Compact Fan Type Ionizer

High-frequency AC Method

#### ER-Q Series

Not need for compressed air. This palm-sized ionizer can be mounted just like a sensor.

### 6 Control of the Dispenser Nozzle Height



#### Micro Laser Distance Sensor

CMOS Type

#### HG-C Series

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

\* As of May 2015, in-company survey.

### 7 Operator Safety Measures



#### Ultra-slim Safety Light Curtain

Category 4 PLc 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 Industrial Devices SUNX, 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 0.25  $\mu\text{m}$ .

**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.

**Obstacle Detection Sensor**  
This photoelectric sensor helps prevent collisions between automated guided vehicles.

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

**Human Machine Interface**  
Combines elegant design with superior operability.

**Ultra-Compact PLC**  
Supports multi-axis position control, temperature control, and networking.

**Temperature Controller**  
Delivers a range of functionality in a compact package.

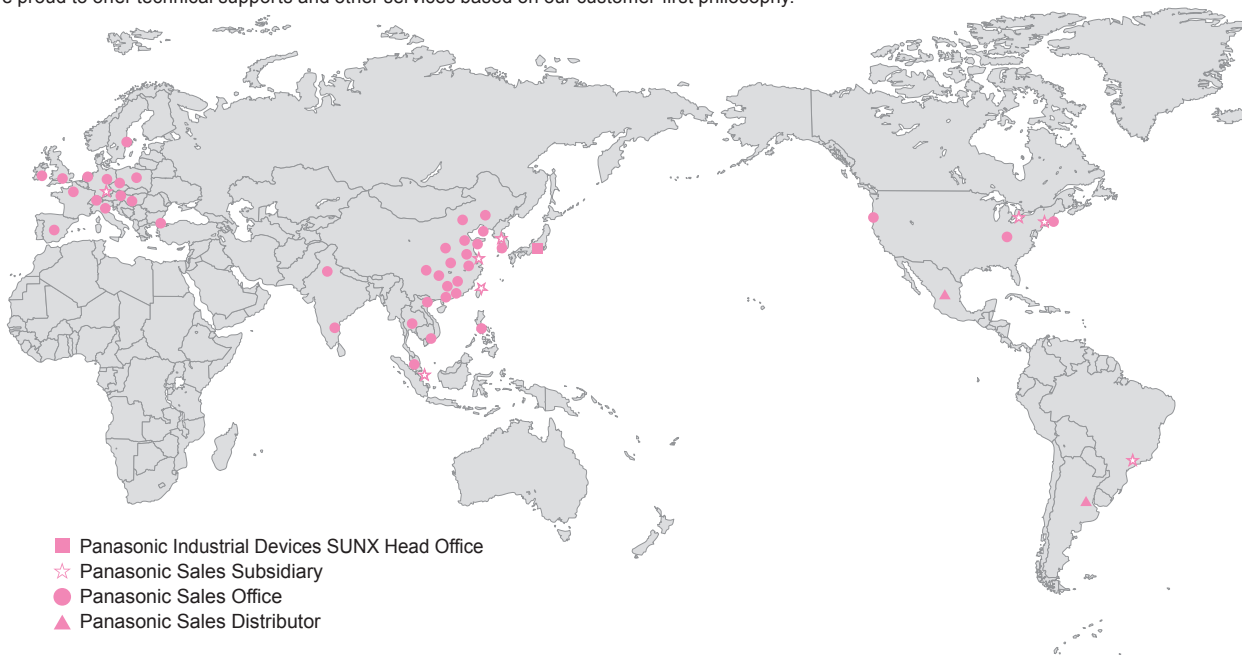
**Eco-Power Meter**  
Monitors power consumption within a facility and generates tracking data, helping visualize unproductive power use.

**UV Curing System**  
Delivers consistent UV rays to targets using temperature feedback and an LED head.

**Laser Marker**  
Provides high-quality marking and processing at high speeds.

## Sales Network

We, Panasonic Industrial Devices SUNX Co., Ltd. provide products, technologies, and services through the worldwide Panasonic sales network, which encompasses the Americas, Europe, China, and Southeast Asia, etc. We've put in place local support organizations staffed by technical specialists and are proud to offer technical supports and other services based on our customer-first philosophy.



● If you have any question about our products, please contact us by E-mail.

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