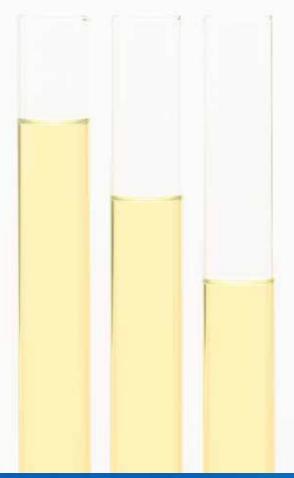
## **Panasonic**

Sensors & Ionizer Solutions Catalog

## For Laboratory Automation

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





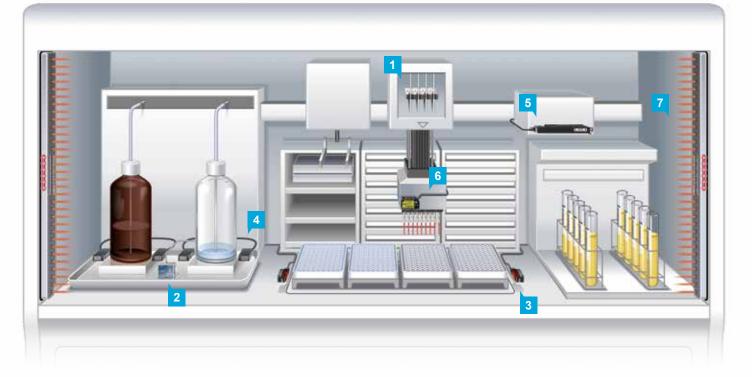




# For Laboratory Automation

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 ø2 / ø3 / ø4 mm ø0.078 / ø0.125 / ø0.156 in tube. Also ideal to detect when reagent or washing liquid runs out.

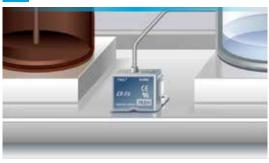
#### [Related Products]

#### 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.

 $\ensuremath{^{\star}}$  For a list of liquids which can be detected, please contact us.

#### 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.



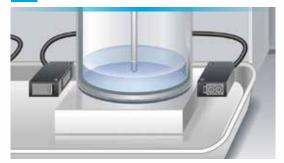
**Convergent Reflective Micro Photoelectric Sensor** 

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.

#### 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

#### 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.

#### Control of the Dispenser Nozzle Height



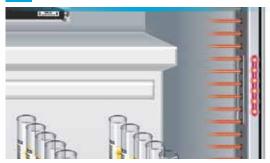
Micro Laser Distance Sensor

#### **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.

#### **Operator Safety Measures**



Ultra-slim Safety Light Curtain

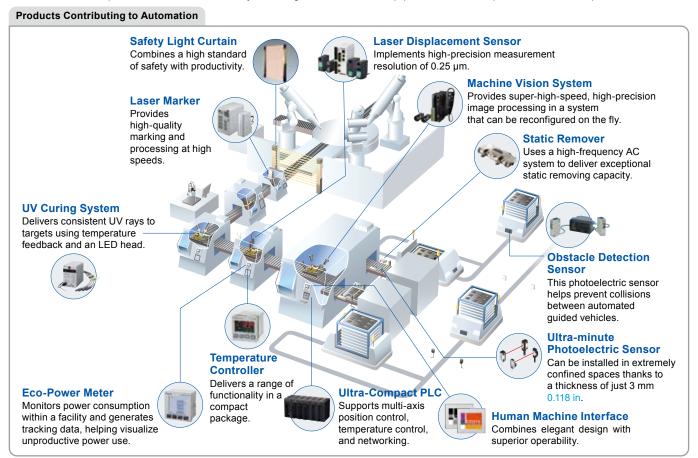
#### Category 4 PLe SIL3

#### **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 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.



#### 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.

■ Panasonic Industrial Devices SUNX Head Office

▶ Panasonic Sales Subsidiary

● Panasonic Sales Office

▶ Panasonic Sales Distributor

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