

Measurement sensor HG-C1000L



Pressure sensor DP-100L



Photoelectric sensor FX-550L



Measurement sensor HG-C1000L

- › Repeatability 10µm
- › Laser class 1
- › Compact and light weight
- › Displays current measured distance



Pressure sensor DP-100L

- › Standard and high-function type
- › Dual display with 12 segment font
- › Resolution 0.05%
- › Vacuum and high pressure type
- › Different models (for panel or wall mounting)



Photoelectric sensor FX-550L

- › High emission power
- › Long range
- › Many built-in functions
- › Large number of optical fibers available

Global Network



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Europe

Asia Pacific

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Panasonic Electric Works

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Overview

IO-LINK SENSORS



IO-Link

With the laser measurement sensors of the **HG-C1000L** series, the pressure sensors of the **DP-100L** series, and the fiber sensor amplifier **FX-550L**, Panasonic offers a wide range of IO-Link capable sensors, which can be used to realize applications for Industry 4.0.

The automation industry is undergoing changes – machines are getting more and more complex, have started to communicate with each other, monitor their own operation status, and are able to detect errors at an early stage. All of this requires large amount of data, data processing, and evaluation. Sensors are generating data all of the time when they act as the

senses of a machine. They recognize parts and measure pressures, lengths, or sizes.

Now it is possible to feed the data easily into the machine network with the help of the universal **IO-Link standard** and an interface. Thanks to the bidirectional data transfer via IO-Link, it is possible to set or read out sensor parameters with a decentralized system.

One of the main advantages of IO-Link is that parameters can be copied across to a new device when a device has to be replaced. This eliminates the risk of errors caused by users setting the sensor parameters manually.

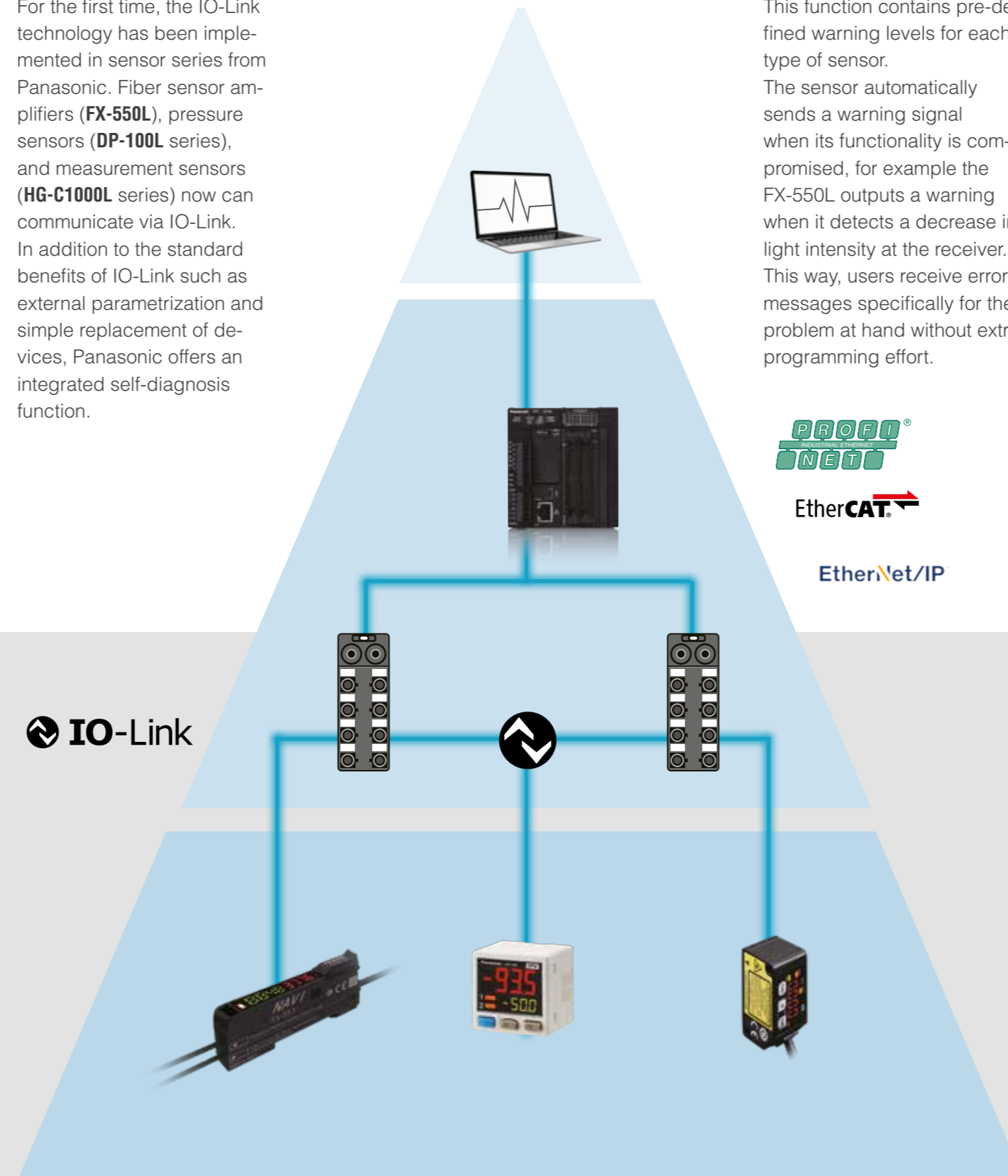
The data can be used specifically to minimize standstill times because problems on the sensor level are detected well in advance. In addition, the search for error causes is made much simpler as many data are known beforehand.

All IO-Link sensors from Panasonic have an integrated self-diagnosis function. The self-diagnosis function monitors function parameters specific to the sensor type and automatically outputs a warning signal if deviations from the specified behavior occur. Users save time because for maintenance it is sufficient to monitor only one signal instead of a number of sensor parameters.

IO-Link from Panasonic

For the first time, the IO-Link technology has been implemented in sensor series from Panasonic. Fiber sensor amplifiers (**FX-550L**), pressure sensors (**DP-100L** series), and measurement sensors (**HG-C1000L** series) now can communicate via IO-Link. In addition to the standard benefits of IO-Link such as external parametrization and simple replacement of devices, Panasonic offers an integrated self-diagnosis function.

This function contains pre-defined warning levels for each type of sensor. The sensor automatically sends a warning signal when its functionality is compromised, for example the FX-550L outputs a warning when it detects a decrease in light intensity at the receiver. This way, users receive error messages specifically for the problem at hand without extra programming effort.



PROFI
NET

EtherCAT

EtherNet/IP

Benefits for customers



Reduction of costs

The standardized connection with M12 connector cables makes the installation easy and simplifies stock management.



Reduction of time and effort

IO-Link sensors can be connected in a fast and easy manner. Central parametrization saves time because it works for several devices at the same time (configuration, replacement).



Self-diagnosis function

The built-in self-diagnosis function outputs sensor-specific signals, e.g. a warning when the light intensity at the receiver decreases. This saves the users the trouble of implementing a diagnosis function for Panasonic sensors themselves.



Machine availability

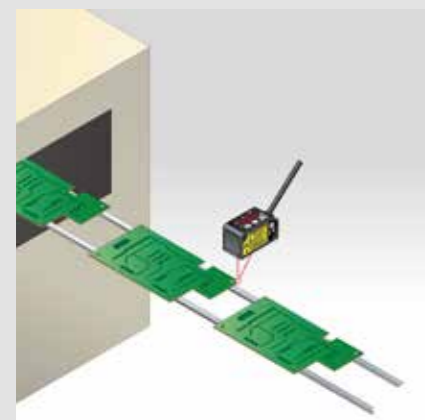
Machine availability is improved considerably because all values and parameter can be read and processed centrally in real time.



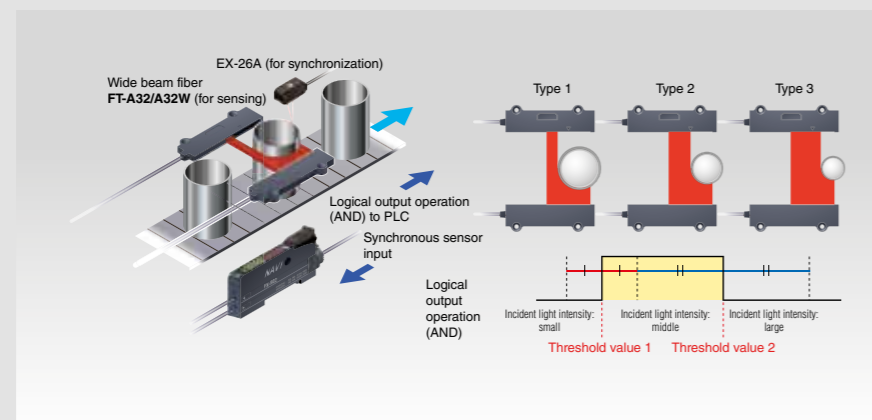
Innovation

The sensors of the future speak IO-Link. This way it is possible to realize innovative machine concepts. Lot size 1 is possible.

Applications

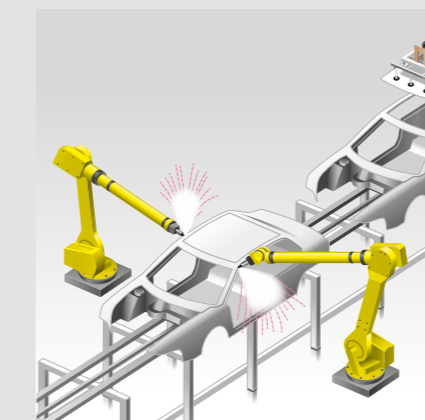


Detection and measuring of circuit boards

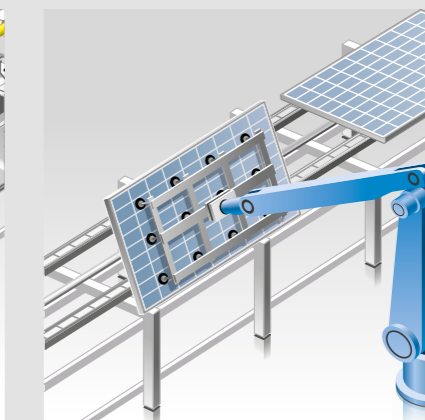


Detection of different objects

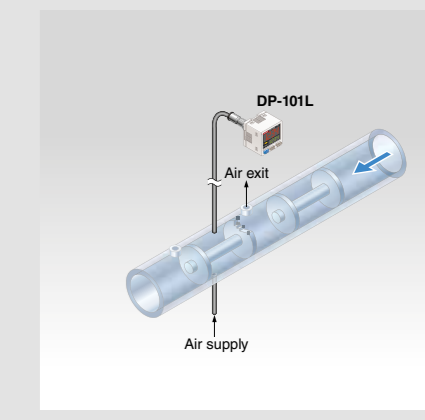
Applications



Monitoring with sensors to minimize standstill times



Remote parametrization for devices in places difficult to access



Pressure monitoring