

OVERVIEW

AUTOMATION PRODUCTS



Panasonic automation products

Panasonic offers a broad spectrum of products for all automation tasks. Along with our service philosophy to advise and take care of our customers, state-of-the-art technology, robust design and compact size form the basis of our business.

You can find Panasonic products in almost all areas concerning automation technology. Our core business consists of: machine and equipment building, medical technology, the chemical and pharmaceutical industries, building automation, water and waste-water management, environmental technology, energy distribution (gas, electricity, etc.), as well as monitoring and saving energy. In addition to our core areas, we offer, for example, solutions for: automated street lighting, solar trackers, open-pit mining (pump control and data transmission), telemetry (data transmission from measuring points), vending machines and people-counting, e.g. for public transportation.

Superior quality from Panasonic

During development, all Panasonic products are subjected to much more severe conditions than they will ever encounter in actual operation. However, such tests help us identify weak spots and eliminate them. This guarantees a long product life-time in applications. In fact we are so convinced about the quality of our products that many come with a 3-year rather than the customary 2-year warranty.

Ecological automation

All together, Panasonic specifies 14 forbidden and hazardous substances. Panasonic's specifications permit less than one-tenth of the level allowed by the RoHS guideline for the 6 most important hazardous substances. Moreover, Panasonic has forbidden the use of another 8 hazardous substances in its products that are not even covered by the RoHS guideline. Hence our own requirements are far more strict than those required by law.



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Innovative sensor technology

Due to the diverse and complex tasks required of automation products and the ever increasing importance of quality management, demands on sensors are becoming more and more specialized. Extreme precision and reliability play the decisive role when it comes to choosing a sensor. Panasonic's innovative sensor technology enables us to meet these demands. New generations of sensors are born from the consistent application of state-of-the-art technology. These sensors are especially characterized by features such as intelligence, multifunctionality and miniaturized construction.

Service has priority

So that we can react quickly to customer wishes, we are constantly striving to improve our service. Whether you require special applications or simply desire technical support, we are there for you at any time. Just give us a call!

Product range

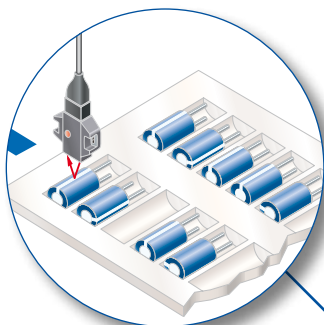
Besides thru-beam, retroreflective and diffuse reflective types, photoelectric sensors, and mark/color photoelectric sensors, we also offer laser and eddy current analog sensors, all of which yield precise results even for complex applications.

Our product range also includes safety light curtains, particular use sensors, inductive proximity sensors, miniature pressure and flow sensors for air, gas and liquids, and ionizers for removing static electricity.

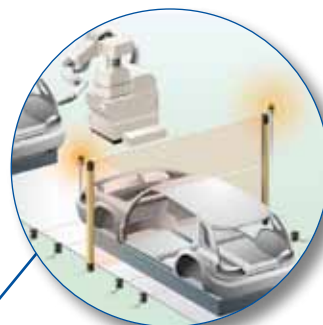


Application spectrum

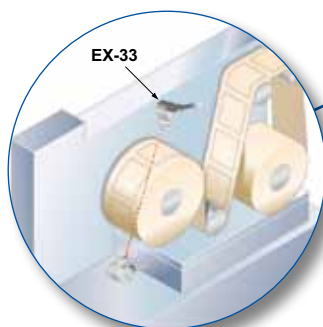
Electronics



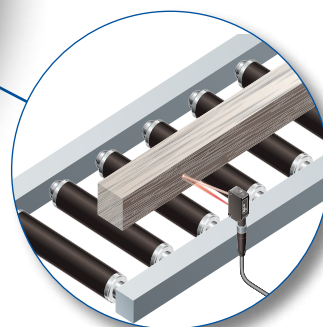
Automobile production



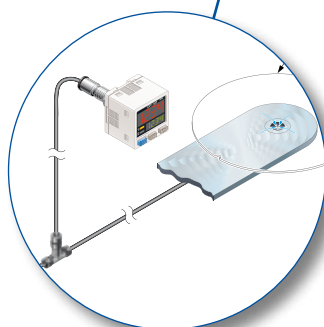
Packaging industry



Lumber industry



Glass/wafer production



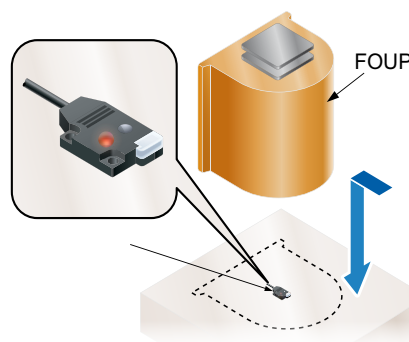
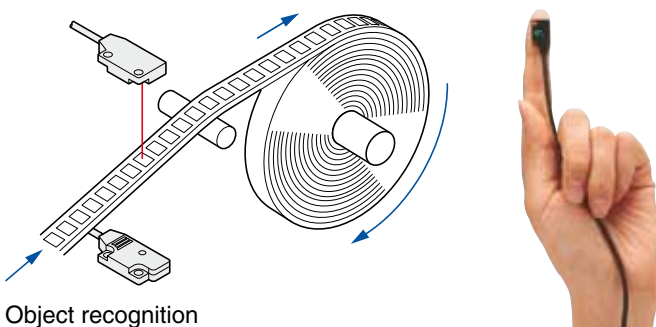
People counting





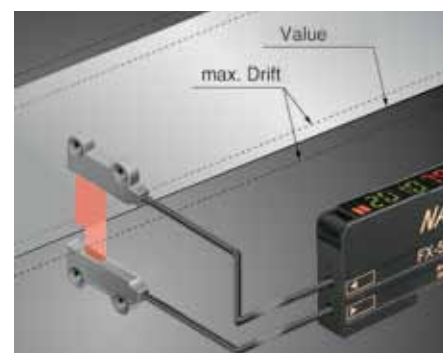
Miniature photoelectric sensors

- Integrated amplifier
- Ultrathin design, 3.5mm
- Visible red LED for simple adjustment
- Space-saving mounting, front or side light types
- Two-color indicator LED
- IP67 degree of protection
- Many product varieties available



Fiber sensors

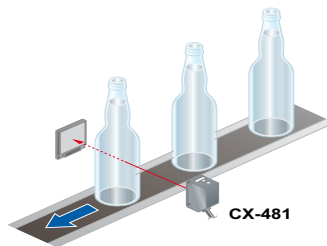
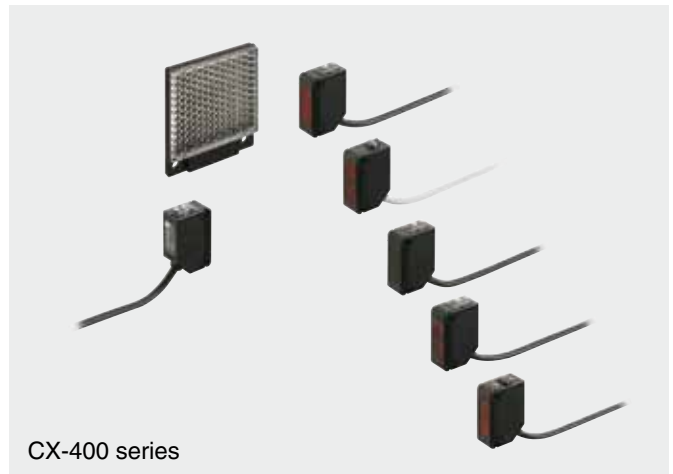
- Response times as little as 25µs
- Digital and analog output
- Amplifier with dual display
- Easy to operate, intuitive menu navigation
- Copy function for up to 12 units without requiring a master unit
- Integrated logic functions
- Large selection of optical fibers, also for special applications



Edge tracking

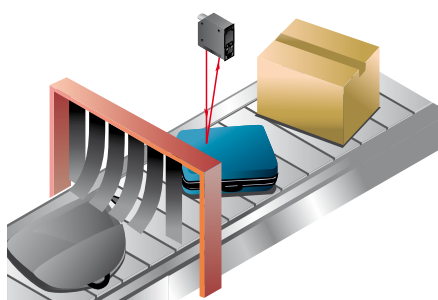
Standard photoelectric sensors

- Extensive product portfolio with 116 models
- Low power consumption for ecological automation solutions
- Connector or cable type
- Two-color indicator LEDs
- Features such as sensitivity adjustment, background suppression, interference prevention, polarizing filters, etc. provide flexibility, allowing our sensors to be used in many applications

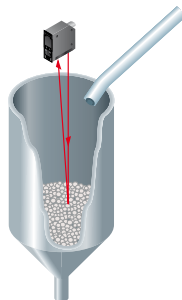


Trigonometric photoelectric sensors

- Robust design with built-in amplifier
- Diffuse reflective type with background suppression means objects can be detected regardless of color, shape or material
- Reliable object detection at distances of up to 2.5m
- Connector or cable type
- IP67 degree of protection

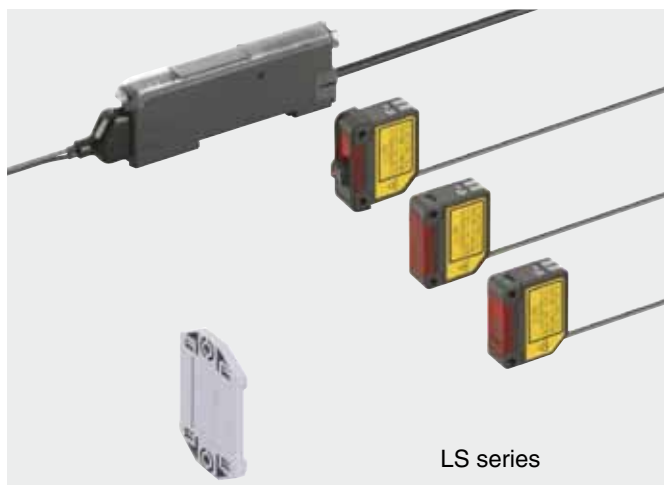


Counting objects



Monitoring fill levels





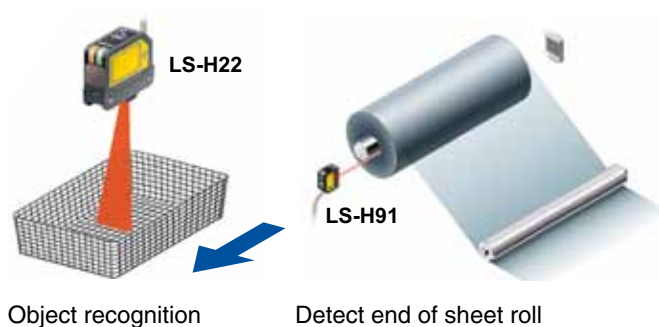
LS series



EX-L200 series

Laser photoelectric sensors

- Large product selection, models with built-in or external amplifiers
- Precision laser technology detects even miniature objects
- Easy operation and mounting
- Individual threshold adjustment
- Coaxial type and line type available



Object recognition

Detect end of sheet roll



HL-G1 series

Measurement sensors

- Triangulation principle enables contact-free measurement of shiny or dull surfaces
- CMOS image sensor enables high resolution
- Fast measuring with sampling rates as fast as 100kHz
- All-in-one solutions and models with exchangeable heads
- Serial interfaces and USB 2.0



HL-C2 series



Measuring eccentricity

Measuring rubber

Pressure and flow sensors

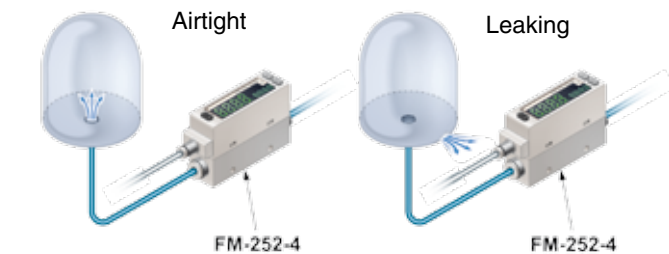
- Measurement devices for gas, water, oil
- Controllers with color display
- Pressure range up to 500 bar
- Types available with built-in and separate pressure connectors
- Types with digital and analog output
- Bidirectional flow detection
- Types for detecting flows from 0.5l/min to 1,000l/min
- Analog and digital output
- Digital and pulse output
- Selectable output modes



DPC-L100 series



Leak test



Leak test



FM-200 series

Ionizer

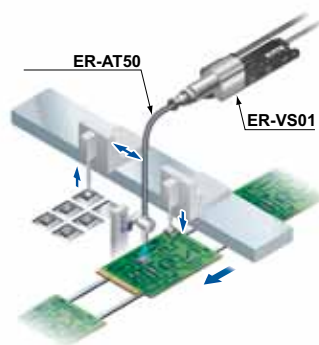
- Neutralize static electricity
- Internal fans or external pressure supply
- Point and wide-area ionizers
- Widths up to 800mm
- LED status display and external signal output
- Easy to maintain



ER-Q series



Discharging plastic surfaces



Discharging IC components



Wafers

Safety light curtains

Panasonic safety light curtains (safety category type 2 or type 4) come in many varieties and are characterized by a modular design that makes them easy to adapt to the application at hand. In addition to being extremely compact, they offer a wide range of integrated safety functions such as muting and blanking. Moreover, light curtains can be connected serially so that there is no dead zone!

Single beam sensors

Panasonic's safety beam sensor ST4 is conceived to secure areas unsuited for safety light curtains at distances up to 15m, e.g. for very small openings or irregularly shaped rooms.

This is possible by using up to 6 sensor head pairs (type 4 IP67), connecting them in line.

Safety laser scanner

The SD3-A1 safety laser scanner from Panasonic offers a cost-effective and flexible alternative to securing large areas. It can be used in both limited spaces and in areas in with shifting danger zones. The SD3 can monitor an area over an angle of 190° and is divided into a warning zone (max. 15m) and protection zone (max. 4m).

Safety control units

Using one of our SFC10 controllers helps you speed up configuring and commissioning safety light curtains.

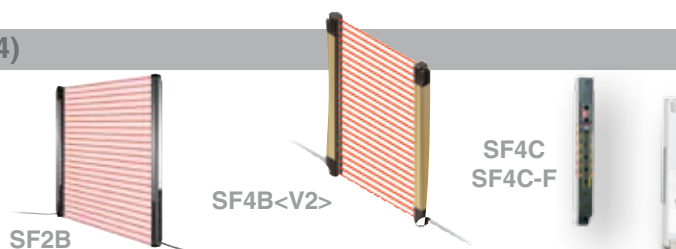
Product overview

Global safety

From the single-beam safety sensor to the safety laser scanner. The four product categories guarantee the safety of persons working with machines in industrial manufacturing. All Panasonic safety products conform to international safety standards. For machine builders who export their machines, this can reduce costs significantly. You do not have to consider country-specific devices during the design phase because each of our safety devices meets the respective safety requirements in all countries. Global safety from Panasonic.

Safety light curtains (type 2/type 4)

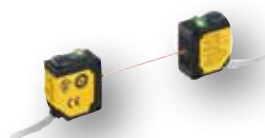
SF2B
SF4B<V2> (finger/hand/arm protection)
SF4B-G<V2> (robust, shock-resistant construction)
SF4C
SF4C-F



Safety beam sensor (type 4)

ST4

ST4



Safety laser scanner (type 3)

SD3-A1

SD3-A1



Safety control units (type 4)

SF-C10

SF-C10



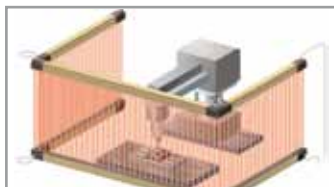
Other safety products from Panasonic

SQ-4 safety liquid leak sensor (type 4)



Application examples

Securing danger zones



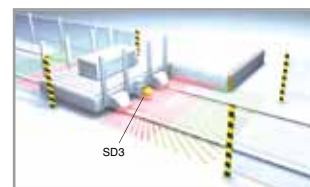
Preventing unauthorized entry



Monitoring dangerous areas along conveyors



Confirming safety around automatic guided vehicles





Effective hardware solutions

Our PLC products are characterized by an excellent price-performance ratio. Despite their compact size, many functions are integrated. For example, a powerful instruction set allows the PLCs to control complex tasks such as analog and positioning control, and perform network functions with practically no limitation.

Innovative programming software

Panasonic PLC programming software Control FPCWIN Pro was one of the first to fulfill the requirements for the international standard IEC 61131-3.

Numerous libraries contain functions and function blocks in which we have invested a great deal of our knowhow and which will save you time programming and debugging.

Long life guaranteed

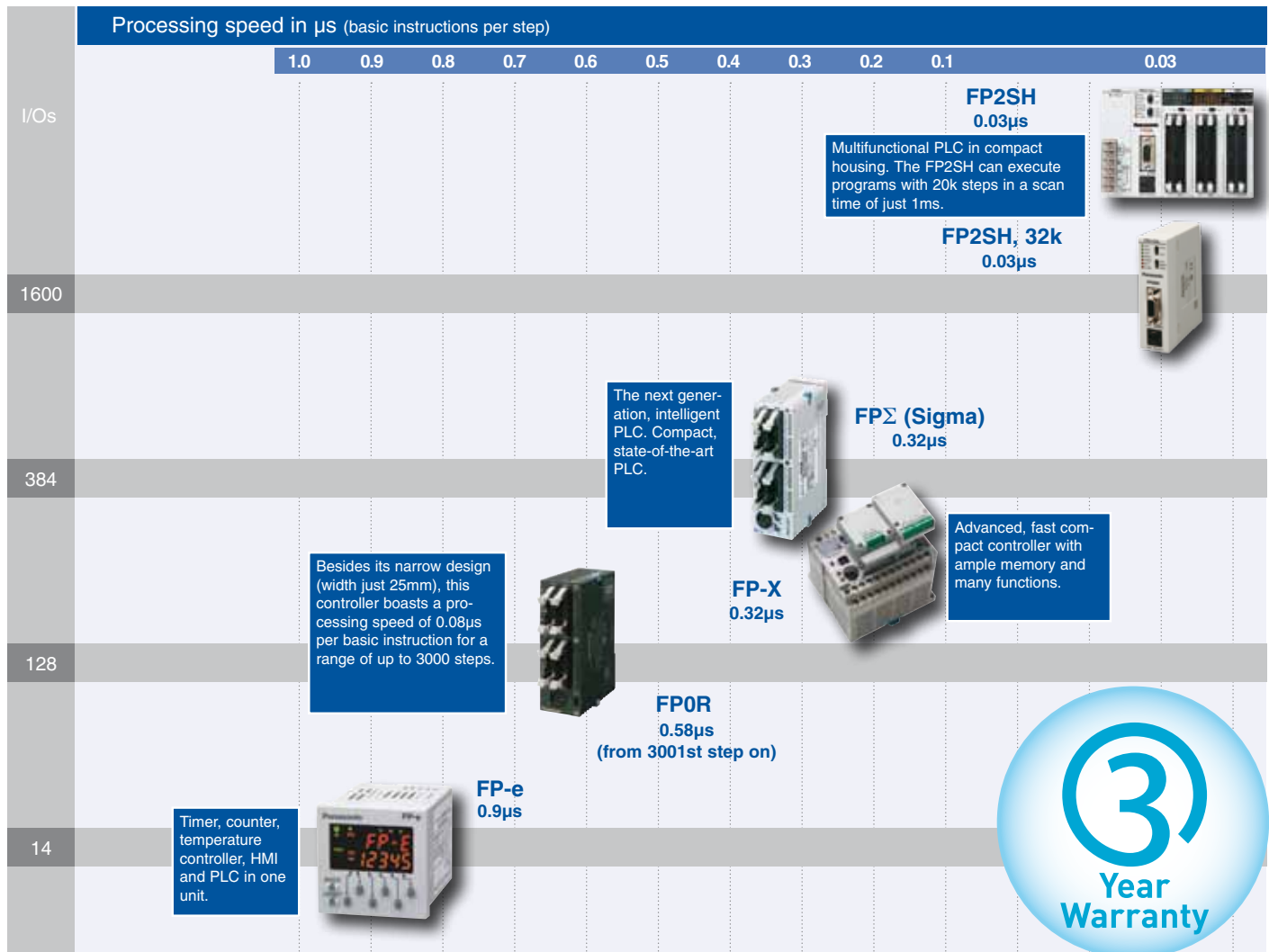
Like all Panasonic products, our controllers are subjected to much more severe conditions than they will ever encounter in actual operation. Hence, a long product lifetime is guaranteed for the application.

Outstanding customer service

Panasonic not only offers a comprehensive PLC product range but also takes pride in providing top-notch service. For a customer-oriented company certified according to ISO 9001, such commitment is self-evident.

Highly trained application engineers put together systems tailored to our customers' needs. Our sales representatives regularly receive training for our hardware and software products.

Product overview



All-in-one

The FP-e series is optimal for the most diverse applications. It's a timer, counter, hour meter, temperature controller and PLC all-in-one.

Perfect for small devices

Despite its capabilities, it measures a mere 25 x 90 x 60mm (WxHxD). This ultra compact design appears to contradict all preconceptions for small PLC products.

Compact PLC

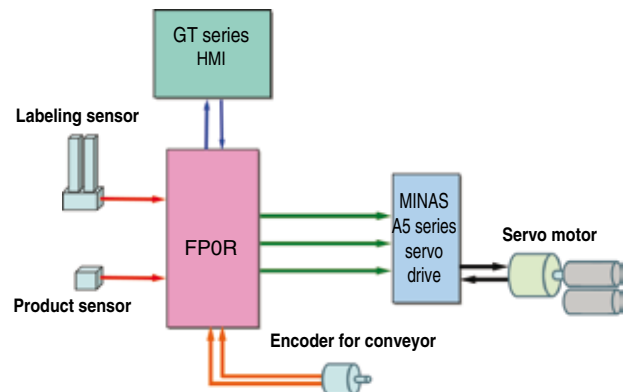
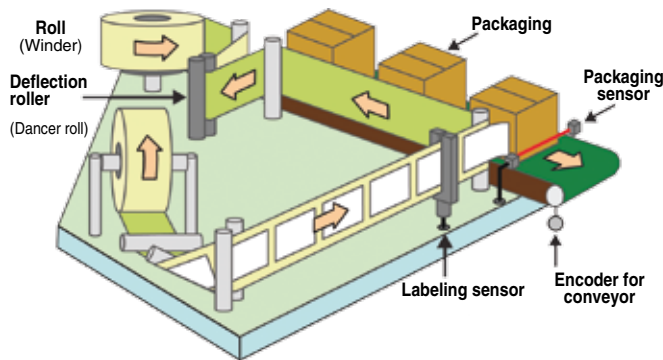
With its two 100kHz pulse outputs, four high-speed counter inputs and RS232C and RS485 communication interfaces, the FPΣ (Sigma) is one of the most flexible controllers on the market. Remarkably, it is also one of the smallest!

Ultra high-performance controllers

The FP2SH is a high-performance PLC with a remarkable processing speed of 0.03 μs . Depending on the model, 32k, 60k or 120k of programming memory is available.

FP0R series

- Extremely high processing speed increases productivity
- 0.08μs/step for basic instructions for the first 3000 steps (0.58μs/step for all further steps). This makes the FP0R ideal for use in positioning tasks and process automation such as found in labeling machines, for example.
- Large program memory for 16k/32k steps
- Generous data register with 12k/32k words
- Independent comment memory so that you can document your application precisely
- USB 2.0 interface enables programs to be transferred quickly
- Maintenance-free, complete backup of all data without needing a battery for the new F type—to date unique in industry!
- Integrated positioning control for up to 4 axes (servo/step motors)
- Many alternatives for network communication via integrated interfaces or expansion units
 - Ethernet (Modbus TCP/IEC 60870)
 - PROFIBUS
 - CC-Link
 - MEWNET-W0
 - C-NET
 - Serial communication via RS485/RS232C (SEAB 1F/RK512/3964R)
- FP0R – just as compact as FP0
- Fully compatible with FP0 units



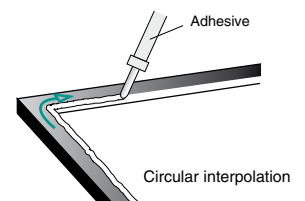
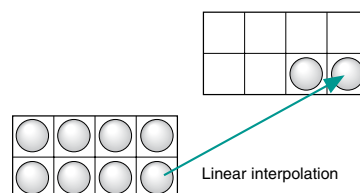
Processing speed of up to 1200 labels/min. Fast start-up time: 30μs. Control of up to 4 axes. 6 channels for high-speed counter input.

FPΣ (Sigma) series

- With its large program memory capable of handling 32k steps, the FPΣ (Sigma) can handle the rising demands in the functionality and complexity of applications, and system expansions or modifications can be easily realized.
- The FPΣ (Sigma) has so much comment memory that it can store a program created according to IEC 61131 including comments.
- The RISC processor enables an extremely high processing speed with a scan time of less than 2ms for 5000 steps.
- Powerful positioning unit
- A pulse output speed of up to 4 million pulses per second and a start-up time of just 0.005ms make the FPΣ perfect for high-precision servo drive applications.
- Temperature control made easy
- Using the PID instruction F356 (EZPID), you can create a one-line program to control temperature. It has never been easier to control temperature with a PLC.



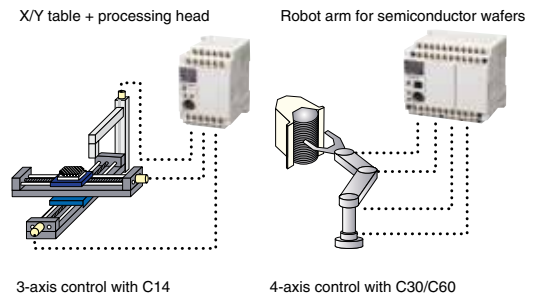
Integrated linear and circular interpolation (FPG-C32T2H-A and FPG-C28P2H-A). Interpolation functions enable simultaneous control of two axes.



FP-X series

- With its large program memory capable of handling 32k steps, the FP-X can handle the rising demands in the functionality and complexity of applications. System expansions or modifications can be easily integrated.
- The FP-X has so much comment memory that it can store a program created according to IEC 61131 including comments.
- The RISC processor enables an extremely high processing speed with a scan time of less than 2ms for 5000 steps.
- Special add-on cassettes allow you to meet the changing demands placed on the controller with requiring additional space.
- Up to 3 add-on cassettes can be easily mounted on the CPU. In this way, the functionality of the controller can be increased without requiring more mounting space. 16 kinds of add-on cassettes, including communication and analog input cassettes, cover a great number of possible applications.
- Integrated 4-axis pulse output
- The CPU with transistor output comes equipped with an integrated pulse output that makes multiple-axis applications for servo and step motors possible. C14: 3 axes, C30/C60: 4 axes.

Integrated 4-axis pulse output: simultaneous 2-axis linear interpolation in two groups: The FP-X transistor output type is the first compact PLC that can manage this kind of axis control.



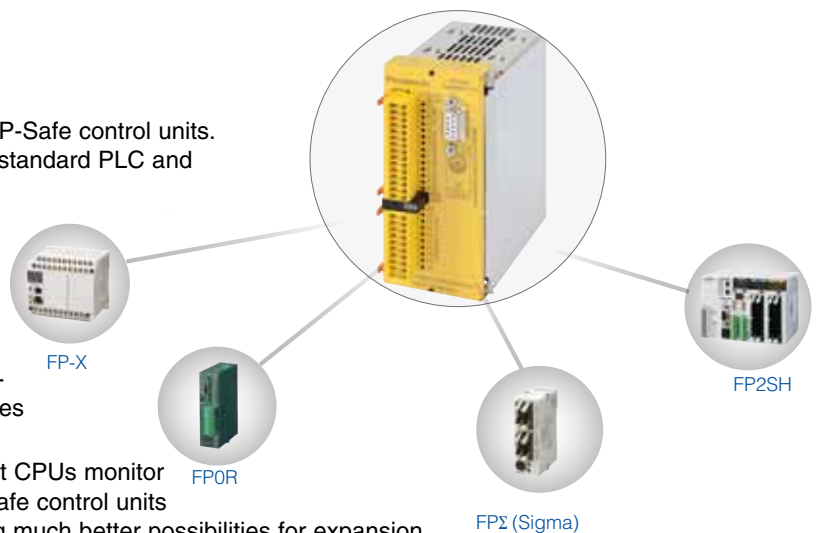
FP-Safe

Compatible with all FP series PLCs

- All Panasonic FP series PLCs can be combined with FP-Safe control units. This combination provides you with a solution for both standard PLC and safety-related functions.
- Easy diagnostics and communication are the greatest advantages of this overall solution.

Flexibility and cost-effectiveness

- Compared to individual safety relay modules, the FP-Safe units can be freely configured. This makes designing the system flexible, simplifies wiring, and enables trouble-free communication with the PLC.
- Compared to complex solutions in which two redundant CPUs monitor standard and safety-related functions, combining FP-Safe control units with FP series PLCs is far less expensive while offering much better possibilities for expansion.



Safety and wide range of functions

- With a single, compact FP-Safe control unit, you can configure up to 5 safety-related functions (SRF), without requiring an expansion unit.
- Setup and configuration is like child's play, thanks to our user-friendly software, FP-Safe Configurator.
- All status information regarding the FP-Safe controller unit's safety inputs and outputs are monitored by the PLC.
- A function block for Control FWIN Pro handles the transmission of diagnostic data to the FP series PLCs.



Telecontrol solutions

For decades Panasonic Electric Works has developed products and solutions for remote control. Our products, which are fine-tuned to function together seamlessly, and wealth of experience enable us to provide expert, comprehensive support.

Where it counts

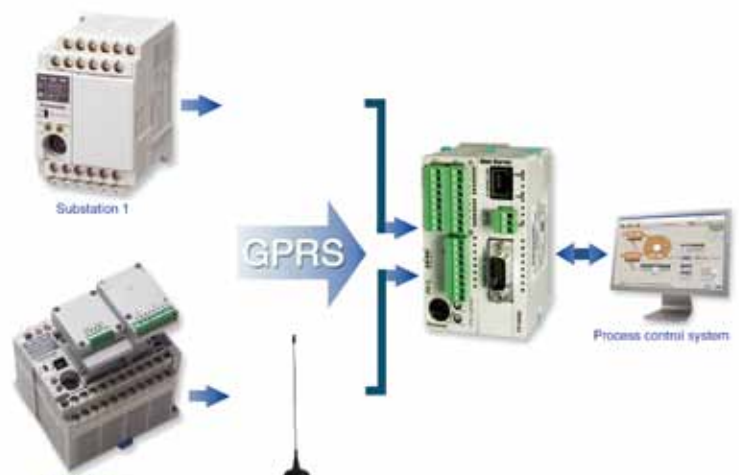
- High quality products
- Customized solutions
- Competent development and advice
- Comprehensive assistance up to the commissioning stage
- Modern communication media = long-term, cost-effective investment

What it comes down to

- Superior operating reliability for the system
- Long-term investment security for expansions
- Calculable costs for acquisition, setup and operation
- Can be integrated into existing systems
- Flexibility in choosing communication media
- System solutions from one provider

Why customers choose Panasonic

- Process automation and remote control in one PLC
- Simple and secure connection from substations to the process control system via GPRS, Internet, modem for example
- Control room is isolated from the Internet, enabling best possible protection for your data
- All the hardware you require—from one provider
- Flexibility when choosing digital and analog I/O units



03/01/2012

MINAS A5 servo drives

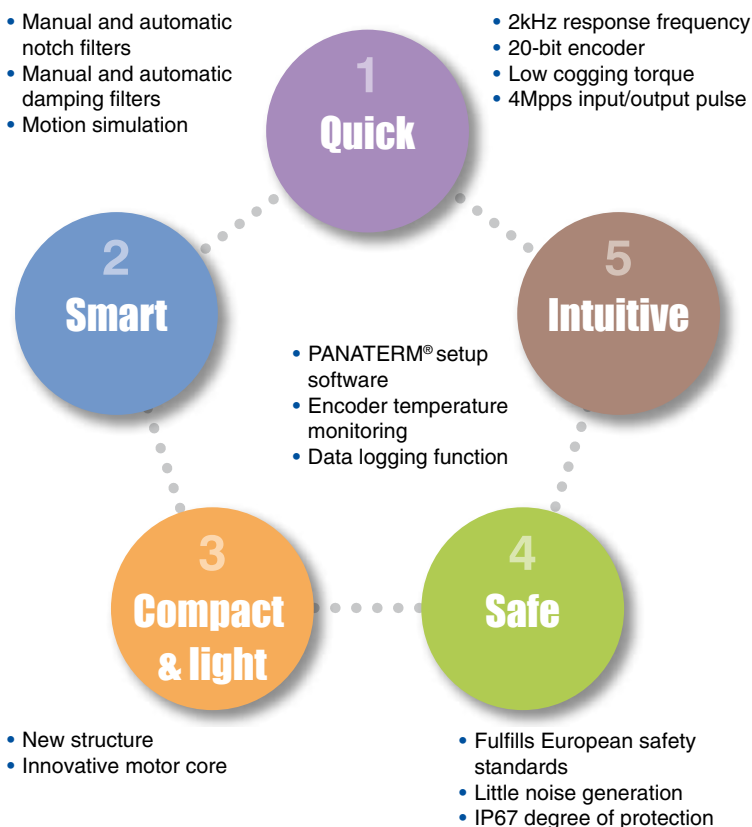
- Ultrafast response frequency: 2kHz band width
- Pulse inputs and outputs with up to 4 million pulses per second
- Improved real-time auto-tuning function during operation
- 4 notch filters: manual/automatic
- 4 damping filters: manual/automatic
- PANATERM® V5.0 software upgrade with motion simulation
- Integrated safety function STO (EN61800-5-2)
- Little noise generation

MINAS A5 motors

- 20-bit encoder; 1.04 million pulses/revolution
- Max. rated rotational speed: 6000rpm
- Low cogging torque
- New design, innovative motor core, high-precision encoder
- IP67 degree of protection for all MSME motor types



Advantages



03/01/2012



Wireless units

Panasonic KR20 wireless units take advantage of the license-free, 2.4GHz frequency band to provide a flexible and efficient alternative for wireless communication between various end devices. Many topologies and protocols are available to choose from.

All KR20 models come equipped with an RS232C interface and can be configured either as a master or slave.

You can download our "Configurator KR" software from our website free of charge. Types with an RS485 interface and 8 (NPN) or 6 (PNP) digital I/Os (KR20, I/O type) are also available and can transfer data extremely fast and securely.

Accessories



Specifications

Type of wireless transmission	Direct sequence/spread spectrum (DS-SS)
Frequency	2403.328 to 2480.128MHz (2.4GHz band)
Number of channels	89 (17 in one "room" simultaneously)
Wave output	6mW
Transmission speed	134kbps
Transmission distance	Up to 250m outdoors (obstacle-free), 50m indoors
Number of connected KR20 units	99
Number of connected units	Up to 31 terminal stations per KR20 (RS485 type AKR2002), max. 254 terminal stations in total
Repeater function	8 repeaters, max.
Interfaces	RS232C and RS485 (RS485 type AKR2002)
Serial transmission speed	1200 to 115,200 kbit per second
I/Os	8 digital inputs and 8 digital outputs (I/O type AKR2015)
Supply voltage	10.8 to 26.4V DC
Ambient temperature	-10 to +50°C

Application example



Aicure UV curing system

Panasonic's UJ30/35 series' LED-based UV curing systems open up a whole new range of applications for curing adhesiv, coating and printing ink. Up to four individually controllable heads that emit UV irradiation at wavelengths of 365nm or 385nm can be connected.

Highlights

- UV-LED head – max. 12,800mW/cm²
- Temperature feedback control
- Saving at application-specific profiles
- LED-heads require no warm-up time
- Passive cooling, no fans required
- Configuration software for UJ35

Advantages

- Short cycle time
- Low operating costs
- Stable irradiation process
- Minimal thermal stress on components
- Compact size
- Easy to maintain and long lifetime

Application examples

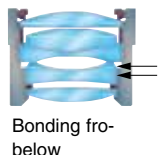
Automotive parts:
Bonding LCD boards to FPCs



Medical products:
Bonding at syringe needles



Optical components



Bonding from below

Printing:
Curing ink on labels



Wide product range

Panasonic's new human machine interfaces (HMIs) can be used anywhere, from industry to building automation. Panasonic HMIs cover a wide spectrum, ranging in size from a compact 3" touch panel to a color 15" display for sophisticated applications.

Quality you see

High-quality design offers a brilliant display and allows you to configure parameters such as brightness and contrast individually so that you can easily read the display no matter where it is. Moreover, all LCDs can be read at wide angles. The compact housing and protective plastic sheets for the display attest to a robust design.

All Panasonic HMIs meet the corresponding international standards and guidelines. As with all Panasonic products, our HMIs are subjected to tests during development that far surpass normal requirements. Components and materials are meticulously selected so that a long lifetime is guaranteed.

Panasonic Movicon

Panasonic provides the most powerful HMI platform for Windows™ CE currently available. Movicon11. This development platform allows you to create sophisticated projects that fully meet your demands for visualization and control within compact environments – without having to relinquish the advantages of a SCADA system. Movicon CE™-Runtime provides our GN series with wide-ranging flexibility:

- Alarm management
- Several drivers
- VBA logic integrated
- Built-in Web client
- Security
- Data logging and database recipes
- Extensive graphics library



GN series: suitable for a wide range of applications

The GN series is well suited for a wide range of applications. Besides basic functions such as recipe management, alarm lists, and multiple language selection, it includes the necessary hardware for data logging.

If you require an HMI between 7" and 15", Panasonic has the right answer for you: the GN series.



	GN07	GN10	GN12	GN15
Display size (W x H in mm)	7" 152.4 x 91.44	10.4" 211.2 x 158.4	12.1" 246.0 x 184.5	15" 304.1 x 228.1
Display	TFT, 256k colors	TFT, 256k colors	TFT, 256k colors	TFT, 16.2 million colors
Brightness	330cd/m ²	230cd/m ²	400cd/m ²	350cd/m ²
Resolution (W x H)	800 x 480 pixels	800 x 600 pixels	800 x 600 pixels	1024 x 768 pixels
Processor	Intel® Atom™ N270 1.6 GHz			
RAM	512MB			
User memory	Depends on the capacity of the CF card			
RS232C	✓	✓	✓	✓
RS485 (422)	Optional			
LAN	2x 10/100/1000 Base-T	2x 10/100/1000 Base-T	2x 10/100/1000 Base-T	2x 10/100/1000 Base-T
USB	2x back	2x back, 1x front	2x back, 1x front	2x back, 1x front
Field bus	Optional			

GT series: compact and versatile

GT series touch terminals make communication between humans and machines easy. With a mounting depth ranging from just 27mm for the GT02 to 39.1mm for the GT32, the GT series are the most compact HMIs in their class. The resolution for text and graphics is 128 x 64 to 320 x 240 pixels.



Temperature controllers

Cost-effectiveness, high performance and precise temperature control characterize Panasonic's entire temperature controller product range.

Universal inputs (thermocouples, resistance temperature detectors, DC-current, voltage), various output types (relay, transistor, current) and user-friendliness are the main selling points for the Panasonic KT series.

Timers, counters

Simple and precise configuration make our analog and digital timers suitable for all control systems. This portfolio is rounded off by flexible and reliable preselection counters and robust hour meters.

Limit switches

Panasonic limit switches are marked by their compact design, high performance, long life and quick mounting as a result of simplified wiring. This qualifies these products to be used in demanding applications such as conveyor systems.

Fans

Panasonic fan motors are characterized by high performance, a long lifetime and quiet operation.

Due to their superior performance, immediate availability in all standard sizes for both DC ("ASFN") and AC ("ASEN") applications, our fans lend themselves to a wide range of applications.



Highlights

KT4H/KT4B

Compact



- 11-segment display with 3 colors for process value
- 4 set values (externally switchable)
- TOOL port included as standard
- MEWTOCOL communication protocol
- Three-point control with second, optional control output (transistor)
- Second optional alarm output

AZD series

DL miniature limit switch



- Forced opening/separation of the contacts in case of welding
- Stable mounting provided by two mounting holes and two adjustment holes possible
- Actuator adjustable in increments of 90° (arm types)
- Superior degree of protection: IP67
- Screw terminals mean quick wiring
- Approvals: CE, UL/CSA, TÜV

LT4H series

Timers



(white front panel)



(black front panel)

- Rated voltage: 12V DC – 24V AC/DC, 100V AC – 240V AC
- Up to 8 operation modes
- Time range can be set from 0.001s to 999.9h and from 0.01s to 9999h
- Socket and DIN rail mounting
- Easy to read
- Two-color LED display
- LT4H-W R twin timer relays with 2 independently configurable operation modes
- Dimensions: 48 x 48 x 65.5mm / 48 x 48 x 70mm

ASEN series

AC fan



- Rated voltage: 100, 115, 200, 220, 230, 240V AC
- For applications with 50/60Hz
- 3 rotation speeds per model
- Frame: aluminum alloy
- Long life
- Quiet operation
- Optional: Cable (length 300mm) or "Faston" (#110) connector

Panasonic Eco-POWER METERS

With its Eco-POWER METER series, Panasonic provides the basis for an intelligent, state-of-the-art energy management system. Energy consumption is identified efficiently and the energy requirements for the various subprocesses become transparent.

You thereby get an overall impression and can plan where to save energy. Constant energy monitoring provides meaningful values for comparison so that you can undertake sensible, realistic measures to optimize energy use, whether in building, factory or process automation.

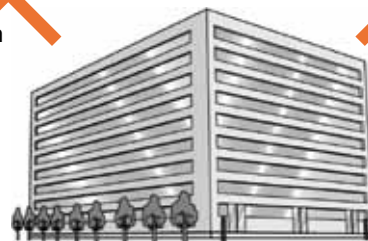
Possible application examples:



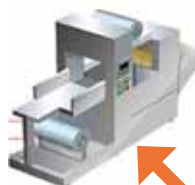
Air condition



Lighting



Building automation



Machines



Assembly lines



Industrial automation



KW2G

- Quick installation via DIN-rail mounting
- Measurements from several devices with one KW2G
- Add up to 7 expansion units
- USB port and integrated RS485 interface
- Modbus RTU/MEWTOCOL protocol
- Suitable for measuring alternating current of 100V/200V
- Simultaneous measurement of electric power and pulse input (e.g. flow amount)
- Display of energy created
- Display of the most important electrical parameters
- Display of the calculated CO₂ value possible
- Integrated pulse counter



Practical expansion connectors make expansion easy



Display data for the main unit



Display data for the expansion units



Add up to 7 expansion units!
8 measuring units total possible!

Current transformers



Rated current (primary side)	Type
5A/50A	AKW4801C
100A	AKW4802C
250A	AKW4803C
400A	AKW4804C

Current transformers are not included with the product.

KW1M

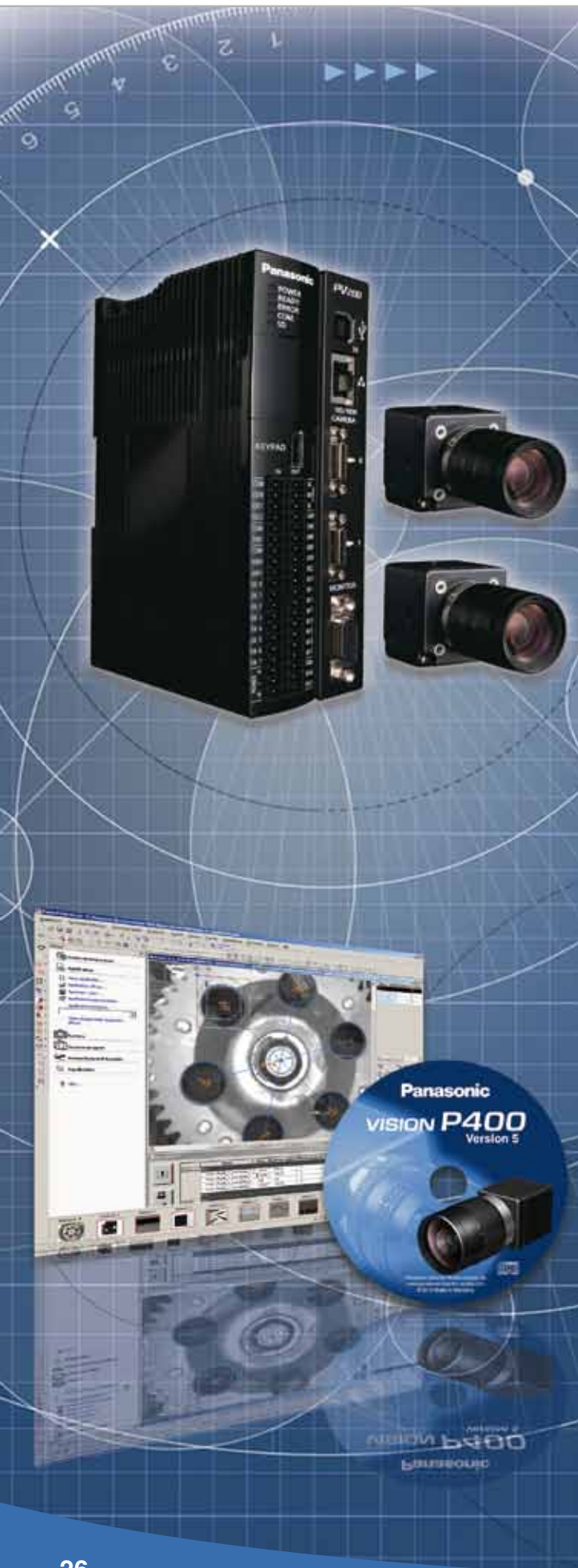
- Screw and DIN-rail mounting possible
- Integrated RS485 interface (Modbus RTU/MEWTOCOL)
- Automatic logging of consumption data using flexibly selectable intervals (save to SD card possible)
- Diverse alarm functions, e.g. when power consumption exceeds set values
- Calendar function
- Suitable for measuring alternating current up to 400V AC
- Monitor and display the most important electrical parameters
- Display of the calculated CO₂ value possible
- Integrated pulse and hour meter
- Pulse output
- Free software for graphically displaying the most important measurement values



KW8M

- Suitable for measuring alternating current up to 400V AC
- Data logging function (AKW8111H)
- Suitable for commercial current transformers (AKW8115)
- Integrated pulse and hour meter
- Up to 99 Eco-POWER METERS can be connected to one PLC
- Networks:
 - Modbus
 - RS485
 - MEWTOCOL (proprietary network protocol of Panasonic)





Experience

Our wide range of systems and solutions allow us to master the most diverse of challenges that face us concerning automated visual inspection.

Panasonic offers the best with its over 30 years of experience in industrial machine vision.

Machine vision systems and accessories

Our range of products offers you flexibility:

- Vision sensors, e.g. PD series 2D code reading sensor
- Compact systems, e.g. PV500 and PV200 Imagecheckers
- High-end PC systems, e.g. P400PD (panel PC) or P400XD
- Machine vision software Vision P400

A wide range of cameras, lenses and lighting round off the program.

Customer service à la carte

Comprehensive solutions tailored to fit the customer

Together with experienced and competent system partners, we develop customized, ready-to-use inspection tasks just for you.

We stand by our customers from beginning to end, from advising to engineering, to training seminars up to putting everything into operation.

Branch-specific experience

Each branch of industry has its own points of emphasis, problem areas and expectations.

Our members will understand your concerns no matter which branch you are involved in:

- Automobile industry
- Machine building
- Food industry
- Packaging industry
- Solar industry

Innovative, top-class marking technology

Highly flexible laser marking systems are more important now than ever before: more and more products have to be marked to enable flawless traceability, and long machine downtimes must be avoided to keep costs down. Our laser marker technology delivers superior marking quality with clear contours, nearly maintenance-free operation and extreme flexibility with little effort required for implementation and low running costs.

Since it requires little space and due to its robust, air-cooled construction, Panasonic laser marker systems can be easily integrated into assembly lines and individual workstations.

Technology

Two different kinds of technology (CO₂ and FAYb (fiber-amplified ytterbium)) with distinct systems offer many ways to mark resins, rubber, organic materials, metal and glass with utmost quality.

Glass marking

In cooperation with tesa, Panasonic developed a technology for permanent glass marking: LTF-C (laser transfer foil-cartridge). This unique technology yields high contrast marking that cannot be altered or destroyed. Applications have been realized for marking solar panels and flat glass, and in the automotive and pharmaceutical industries.

Service for product samples

Take advantage of our free product sample service and let yourself be convinced of the quality of our laser marking systems. To expedite processing, fill out the form on our website: <http://www.panasonic-electric-works.com/peweu/de/html/21556.php> (or use your Smartphone to scan the code on the right).



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Europe

Asia Pacific

China

Japan

Panasonic Electric Works

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