MITSUBISHI ELECTRIC
Changes for the Better

for a greener tomorrow eco Changes

iQSensorSolution

Connecting ! Visualizing !
For a more seamless sensor control !

iQ Sensor Solution

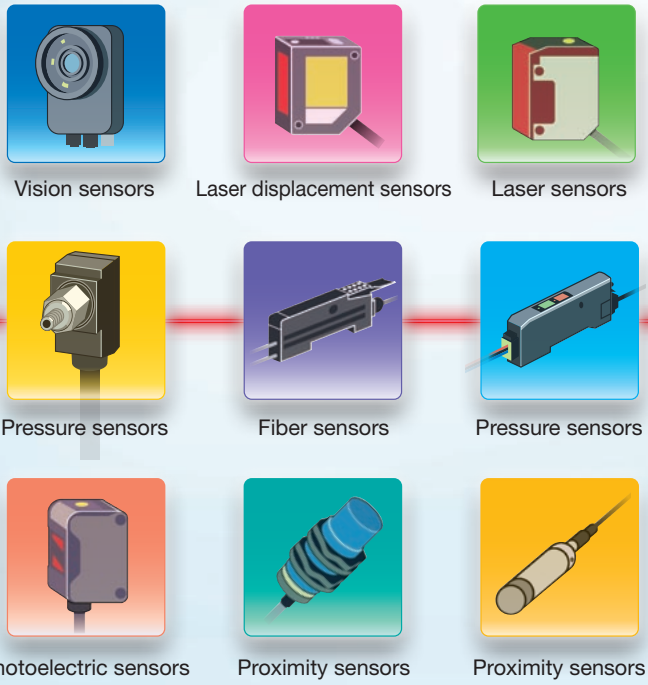
iQSS

A tool for connecting ! Visualizing ! For a more seamless sensor control !

Sensors used on the manufacturing floor are becoming more advanced and complex. Managing your sensor configuration tools, and maintaining and starting up your equipment can be costly and hugely time consuming.
Through a collaboration with partner manufacturers, Mitsubishi Electric offers **an engineering tool** that enables intuitive configuration and maintenance of sensors.
This tool provides a solution that enhances the interaction between sensors and PLCs, HMIs and engineering softwares, which effectively reduces the customer's TCO*.
The solution is iQ Sensor Solution (iQSS).

* TCO: Total Cost of Ownership

iQSS supports **all kinds of sensors**, from standard type all the way up to full advanced sensors.



Ethernet

CC-Link IE Field

CC-Link

AnyWireASLINK

COGNEX

BALLUFF

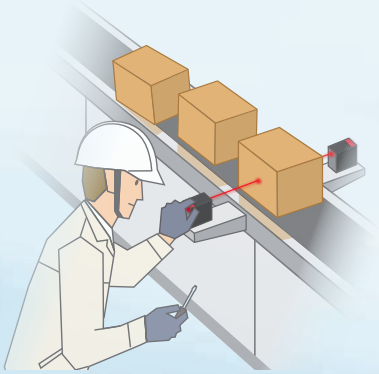
Future release

Panasonic

OPTEX FA

Anywire

MEE



Sensor monitoring
See P.6

Easy startup
See P.5

Easy tuning
See P.7

GX Works2
Engineering software

iQSS

Dedicated linkup tool
See P.11

MELSEC-L PLC

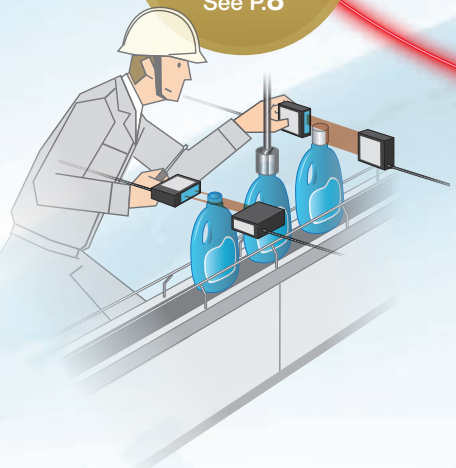
GOT2000 HMI

MELSEC-Q PLC

Easy programming
See P.8

Easy logging (TBA)
See P.10

Backup/ restore
See P.9



MITSUBISHI ELECTRIC

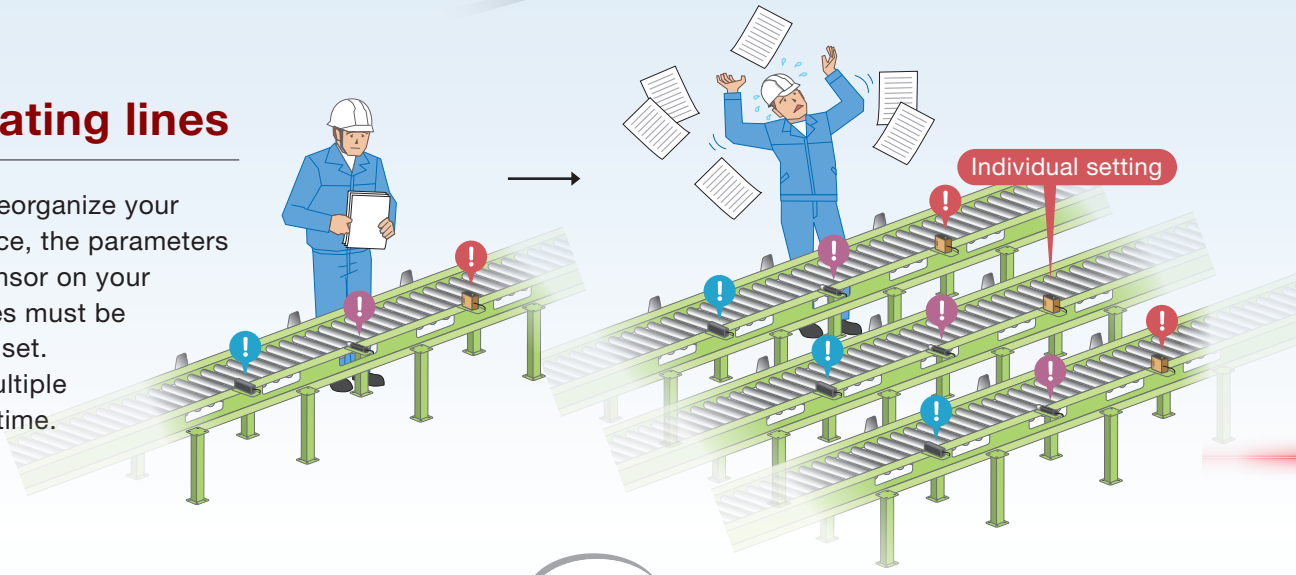
Do you have problems to solve at your production site?

Sensor setting

Complex sensors require many setting items, increasing setup and maintenance time.

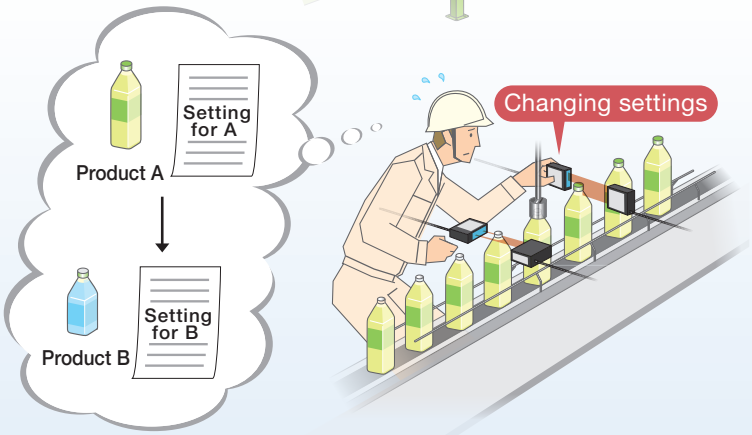
Duplicating lines

When you reorganize your factory space, the parameters for each sensor on your existing lines must be individually set. Creating multiple lines takes time.



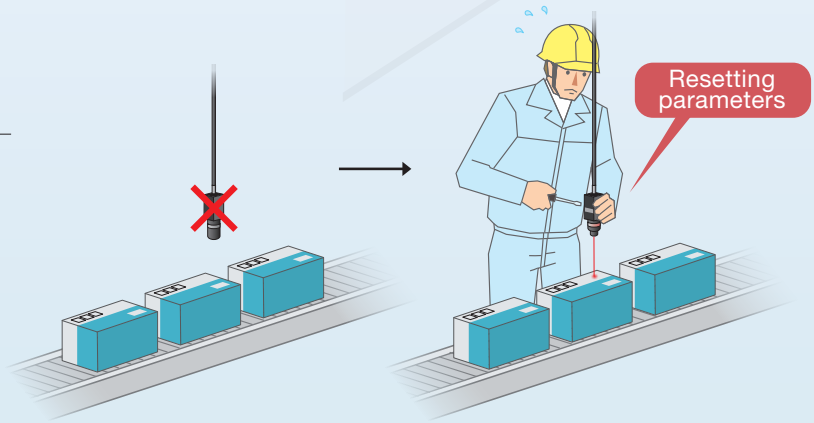
Changing the set-up

When you manufacture multiple products on a single line, sensor parameters have to be changed every time the product changes. Changing the set-up takes time.



Replacing sensors

When sensors fail, they don't just have to be replaced. It is also necessary to reset the parameters for the new sensor. System recovery takes time.



Enhanced linkups between third party partners sensors and Mitsubishi PLCs, HMIs and engineering software reduces customers' TCO.

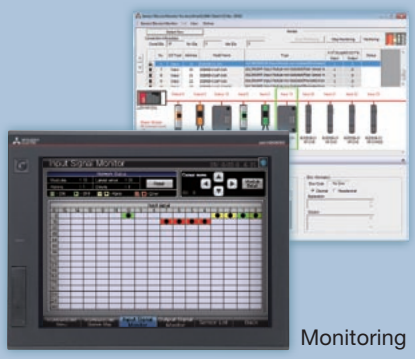
System design

To manage projects simply, we provide a workspace tree that enables projects to be managed in a single location, and a system configuration chart that depicts the entire system graphically.

System configuration management

Testing & startup

Functions are provided that allow monitoring from a single screen based on the system configuration chart so that the causes of problems can be identified quickly. This also shortens the time taken to adjust sections involving multiple devices.

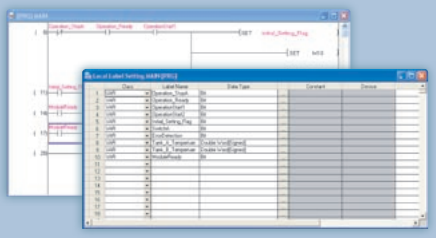


Monitoring

iQSS

Programming

The labels used by PLCs can also be used by HMIs and sensors. This takes all the bother out of label setting.
GOT sample screen libraries, sample ladders and function blocks, etc. are supported.



Label programming

Operation & maintenance

To make backups less laborious, batch read/write functions are provided for PLC, HMI and sensor settings

Sensor configuration read/write

Lower TCO

Lower development costs

- Easy startup See P.5
- Easy programming See P.8
- Dedicated linkup tool See P.11

Lower production costs

- Easy tuning See P.7

Lower maintenance costs

- Sensor monitoring See P.6
- Backup/ restore See P.9
- Easy logging (TBA) See P.10

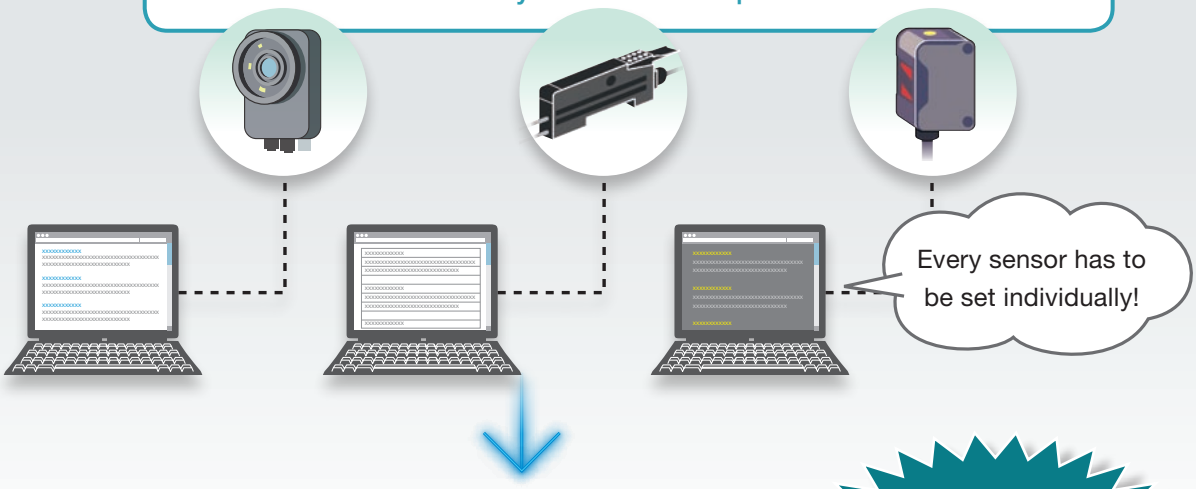
iQSS eliminates the hardships of conventional sensor control.

Easy startup

System startup is easy!

Problem

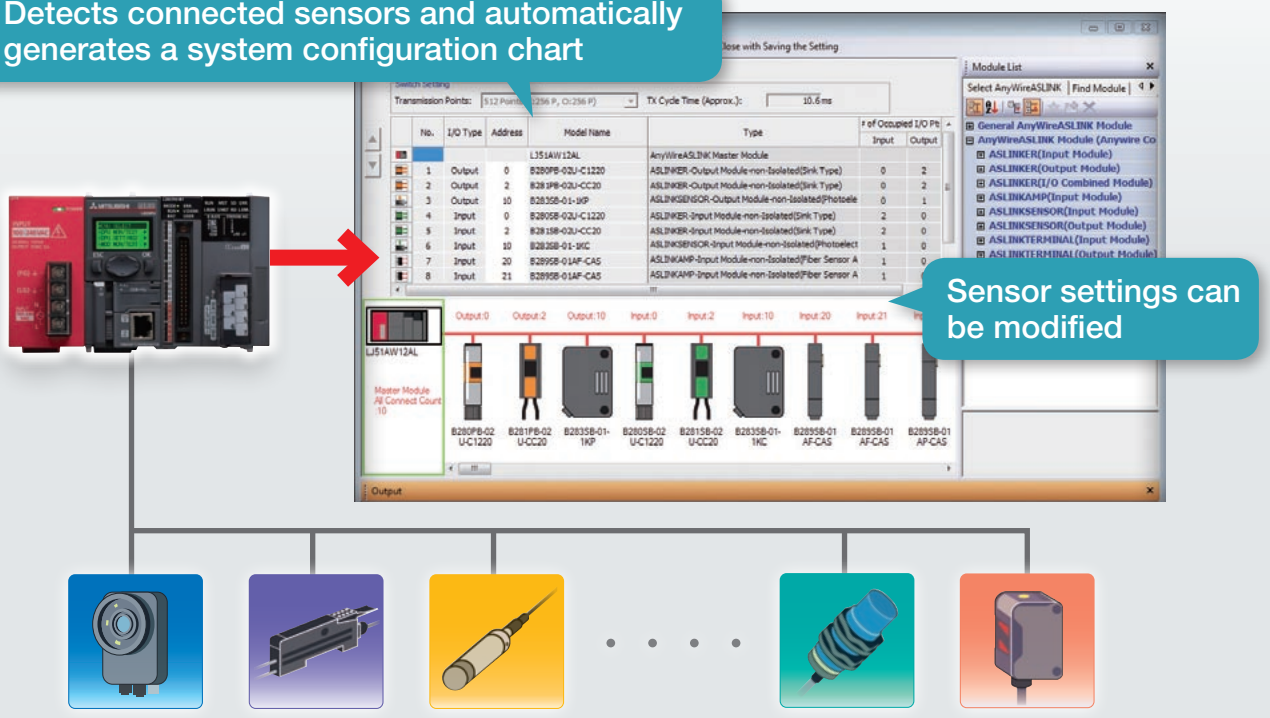
We bought some new sensors, but they're from different manufacturers and the configuration methods are all different. Manually entering the same sort of data for every sensor is a real pain...



With iQSS, a system configuration chart (GX Works2) is automatically generated for iQSS-compatible partner sensors! Settings for each sensor can be performed from your system configuration diagram!

Lower development costs!

Detects connected sensors and automatically generates a system configuration chart

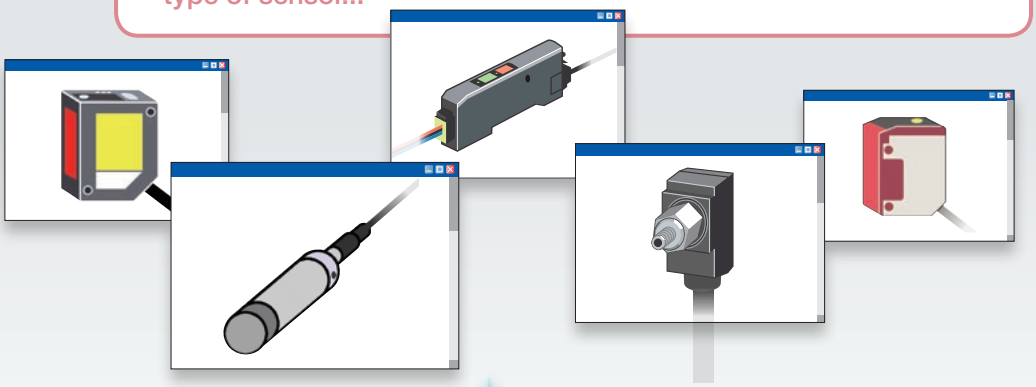


Sensor monitoring

Sensor monitoring is easy!

Problem

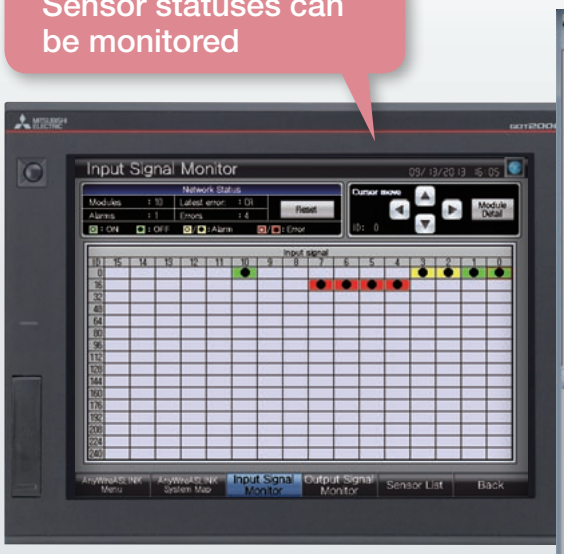
Each manufacturer uses a different tool, so when we try to monitor the sensors, we have to open different monitor windows for each type of sensor...

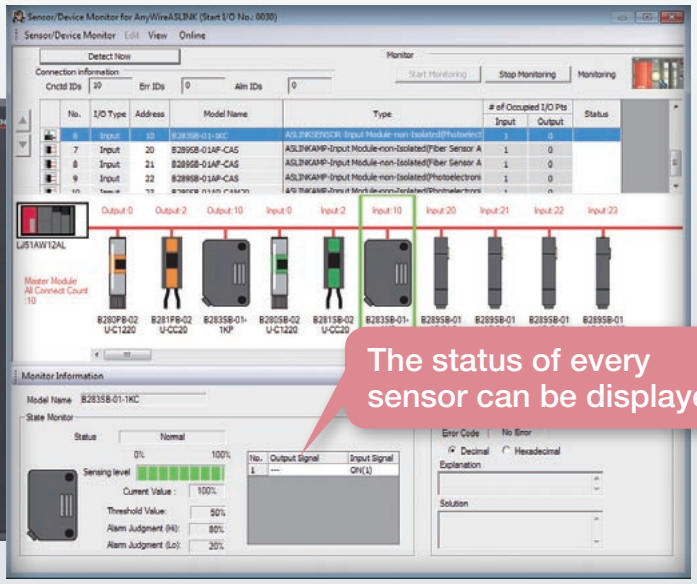


With iQSS, iQSS-compatible partner sensors can be displayed in a single window, allowing comprehensive monitoring!

Lower maintenance costs!

Sensor statuses can be monitored





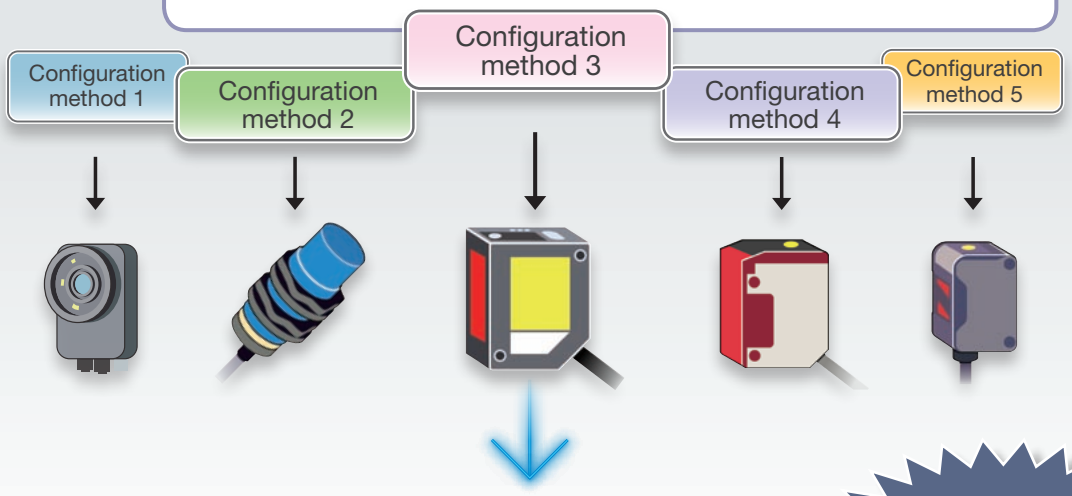
The status of every sensor can be displayed

Easy tuning

Modifying the sensor parameter settings is so easy!

Problem

The parameter configuration methods and tools are different for each sensor, so configuration is really difficult...

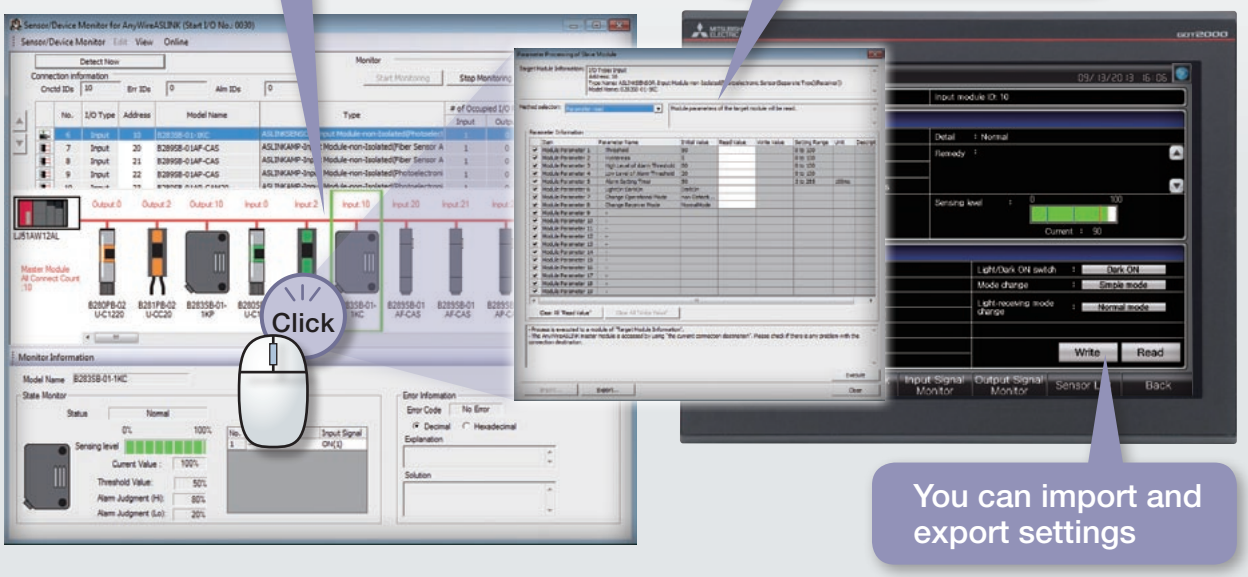


With iQSS, the ability to make settings for all your dedicated tools through integrated operation saves you time for different brands of sensors in the engineering environment!

Lower production costs!

You can select a sensor icon and configure it using a standard procedure

Settings can be managed collectively



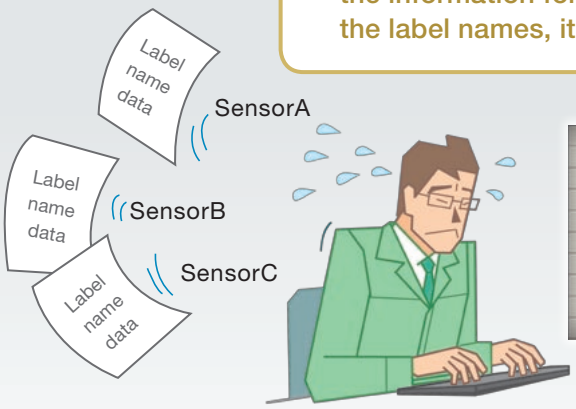
You can import and export settings

Easy programming

Programming is easy!

Problem

I want to assign label names to devices to improve program readability, but remembering which devices were used to store the information for each sensor and then manually entering the label names, it's so easy to make mistakes...



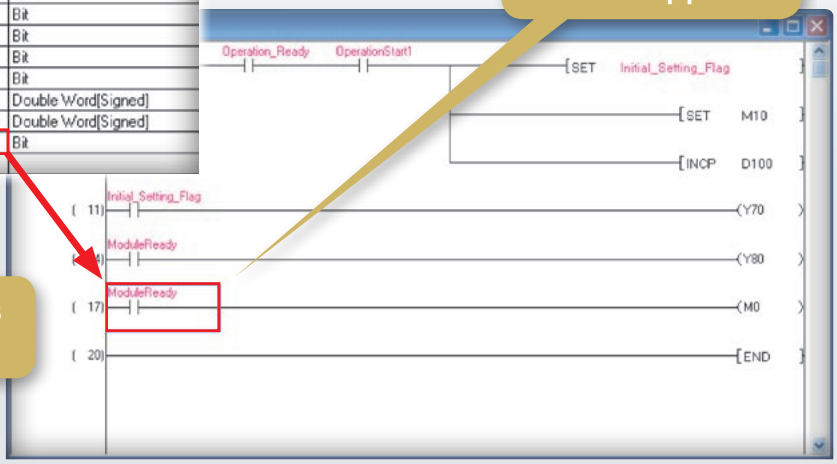
	Class	Label Name	Data Type
1	VAR	Operation_StopA	Bit
2	VAR	Operation_Ready	Bit
3	VAR	OperationStart1	Bit
4	VAR	OperationStart2	Bit
5	VAR	Initial_Setting_Flag	Bit
6	VAR	SwitchA	Bit
7	VAR	ErrorDetection	Bit
8	VAR	Tank_A_Tempertuer	Double Word[Signed]
9	VAR	Tank_B_Tempertuer	Double Word[Signed]

With iQSS, the label name data for sensors can be imported easily, even for different brands!
No need to manually enter label names!*
Programming is also easy, using function blocks (FBs), sample ladders and sample screens!

Lower development costs!

	Class	Label Name	Data Type
1	VAR	Operation_StopA	Bit
2	VAR	Operation_Ready	Bit
3	VAR	OperationStart1	Bit
4	VAR	OperationStart2	Bit
5	VAR	Initial_Setting_Flag	Bit
6	VAR	SwitchA	Bit
7	VAR	ErrorDetection	Bit
8	VAR	Tank_A_Tempertuer	Double Word[Signed]
9	VAR	Tank_B_Tempertuer	Double Word[Signed]
10	VAR	ModuleReady	Bit
11			

Sensor label names can be imported!



Label names, which are text strings that can be displayed instead of device names, make programming more efficient and help prevent device input errors.

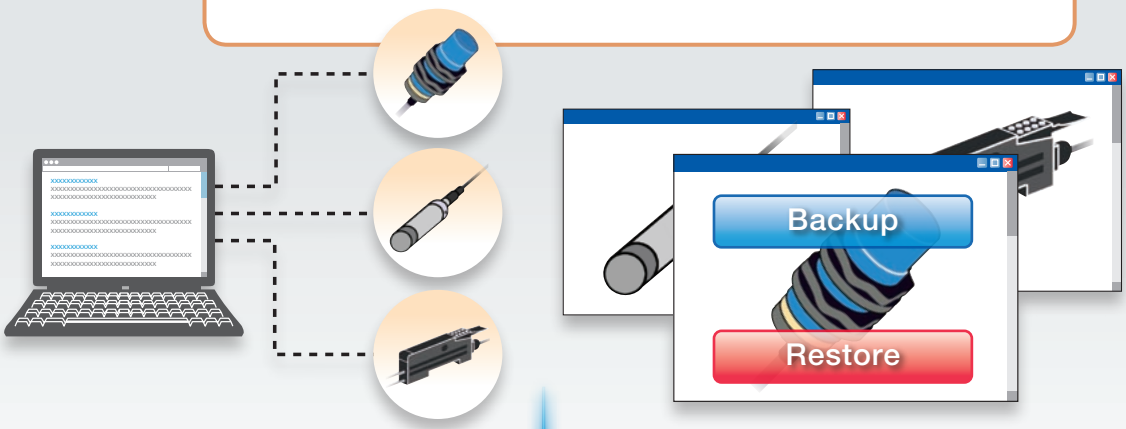
*Easy programming is not supported by Ethernet and CC-Link IE Field Network.

Backup/ restore

Backup/restore is easy!

Problem

Backing up the sensor parameter settings is a real problem because the different manufacturers all have their own tools.



With iQSS, the settings for iQSS-compatible partner sensors can be backed up and restored using the SD memory card in PLCs!

Lower maintenance costs!

You can select a sensor icon and run backup/restore

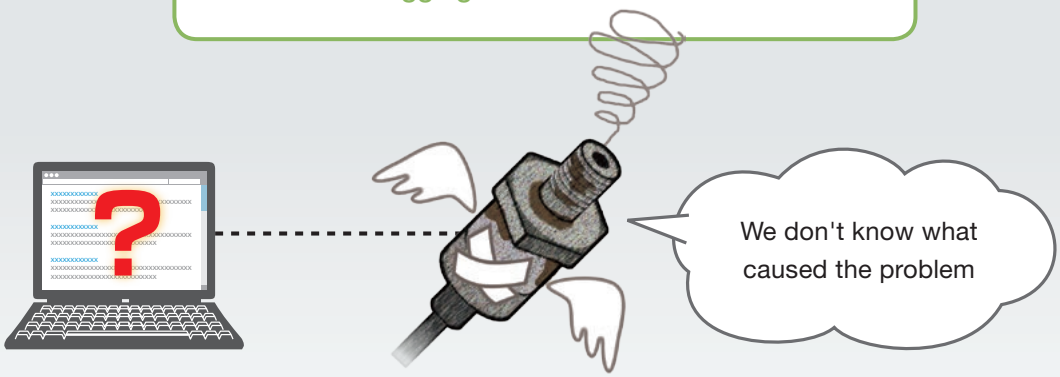
Easy logging

History collection and management is easy using logging!

Future support

Problem

How do we manage the histories of sensors with no logging function?



With iQSS, the sensor data can be stored as PLC logging data. Data management and analysis for sensors without logging functions are also possible!

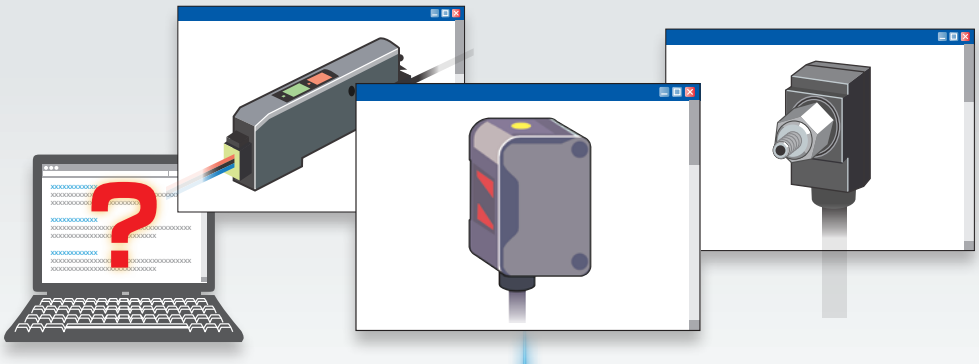
Lower maintenance costs!

Dedicated linkup tool

Dedicated tool startup is easy

Problem

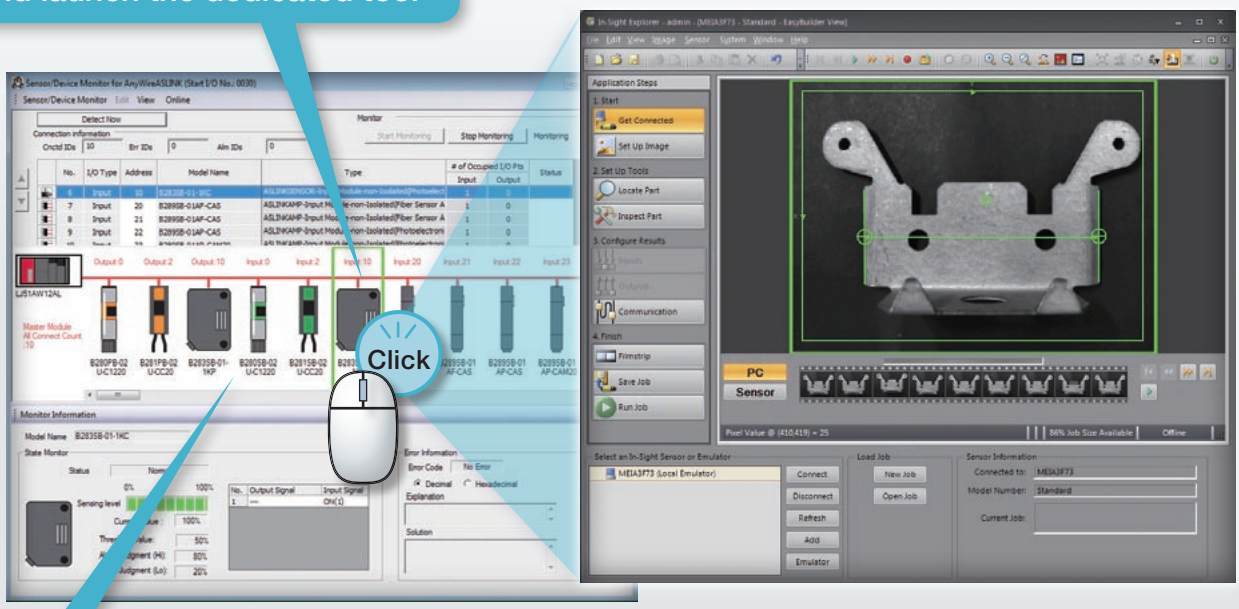
It's hard to figure out which dedicated tool to launch to change the sensor configuration...



With iQSS, you can start up all of your dedicated tools from your engineering environment!

Lower development costs!

You can select a sensor icon and launch the dedicated tool



Icons can also be linked to respective sensor manuals

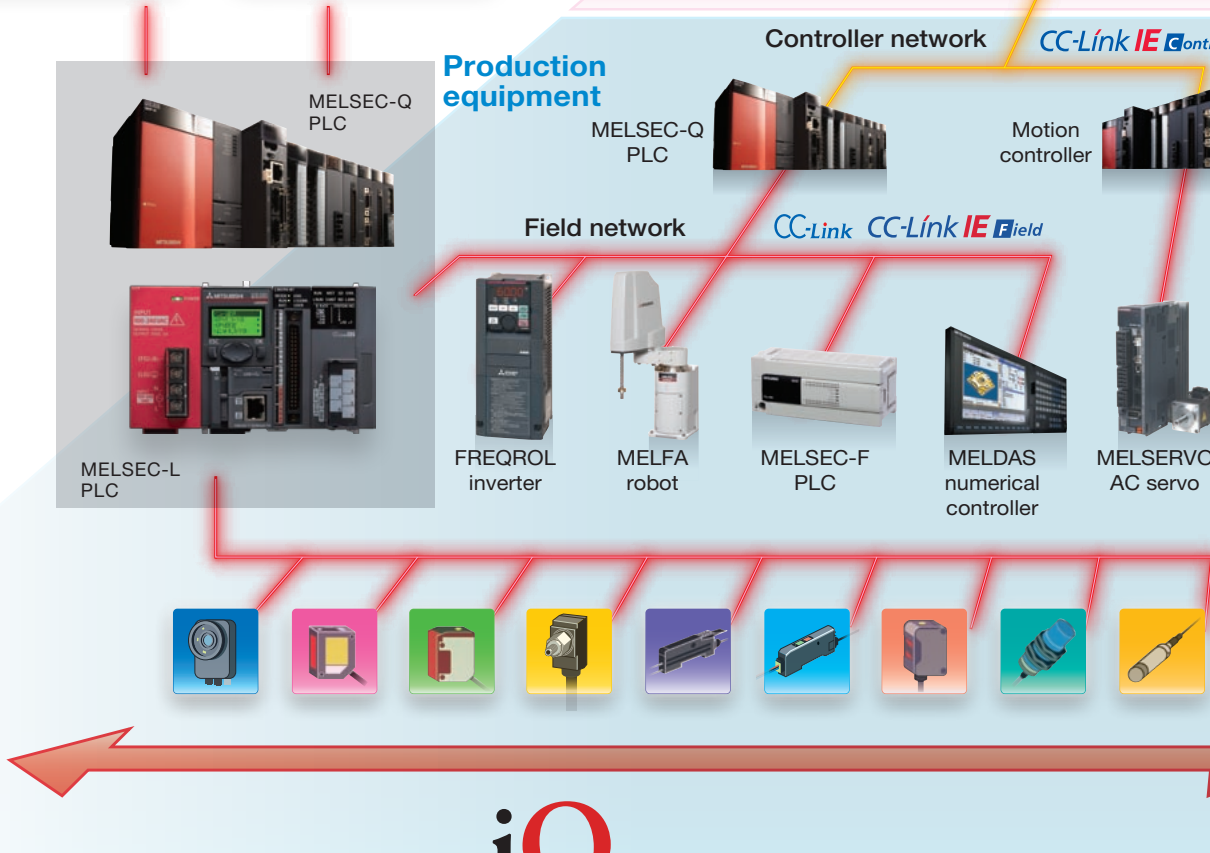
iQSS

Lets you configure, monitor and set logging for sensors in an engineering environment!

Allows on-site sensor status monitoring, backup/ restore and configuration modification

GX Works2
engineering environment

GOT2000
HMI



ERP:Enterprise Resource Planning MES:Manufacturing Execution Systems

Lineup of iQSS supporting products

AnyWireASLINK

MELSEC Q series MELSEC L series

Easy startup | Easy programming | Sensor monitoring | Backup/restore | Easy tuning | Dedicated linkup tool

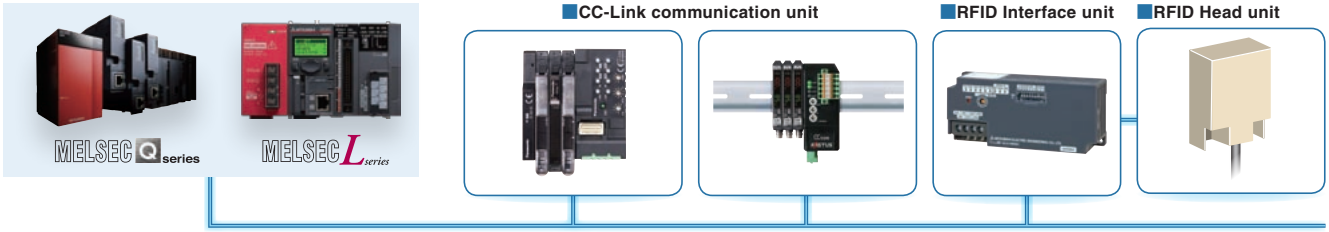
AnyWireASLINK makes it possible to centrally monitor (visibility) the state of all sensors from the programmable controller, by that improving the operation rate and reducing man-hours.
AnyWireASLINK also helps to save space in the machine and control system that uses various sensors.

CC-Link

MELSEC Q series MELSEC L series

Easy startup | Easy programming | Sensor monitoring | Backup/restore | Easy tuning | Dedicated linkup tool

CC-Link is a high-speed and high-reliable deterministic I/O control network which realizes reduced wiring whilst offering multi-vendor compatible products. This open field network is a global standard originating from Japan and Asia.



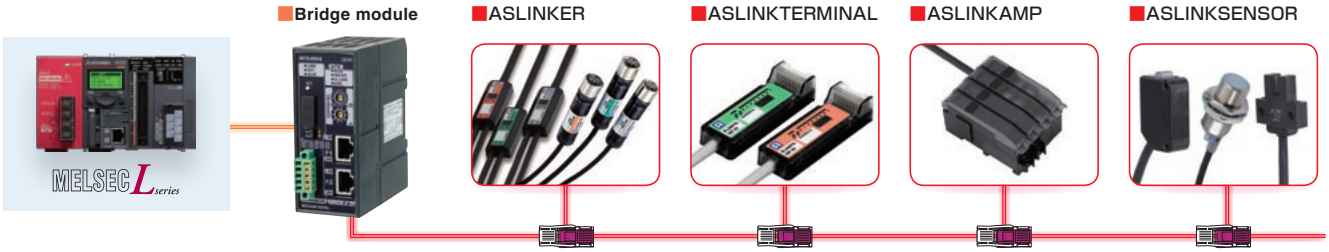
CC-Link IE Field

MELSEC L series

Easy startup | Sensor monitoring | Backup*/restore | Easy tuning | Dedicated linkup tool

*Backup/restore function is available for ASLINK slaves.

CC-Link IE Field is an all-round versatile gigabit Ethernet based network integrating controller, I/O control, safety control, and motion control in a flexible wiring topology supporting star, ring, and line configurations.



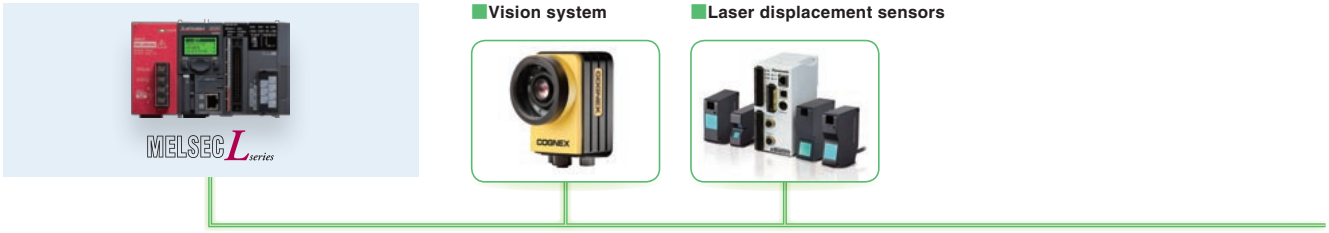
Ethernet

MELSEC L series

Easy startup | Easy programming* | Sensor monitoring | Backup/restore | Easy tuning | Dedicated linkup tool

*Easy programming (labels) is not supported.

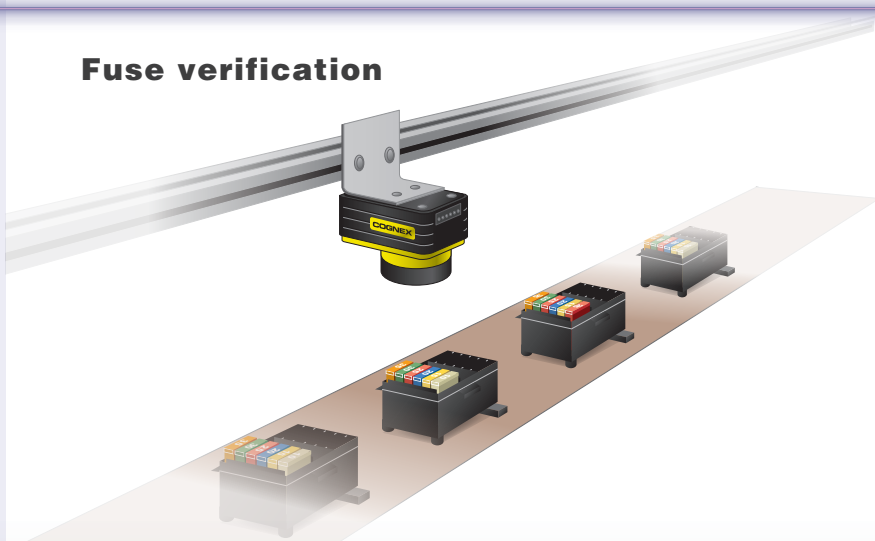
Many devices are connectable via widely available Ethernet.



Vision system

Machine vision system is used to identify size, shape, color and position of objects for outer-appearance inspection and positioning control.

Fuse verification



Fuse colors and prints on the fuses are identified to verify their installed positions.

Cognex Corporation

COGNEX

Ethernet

Easy startup | Easy programming* | Sensor monitoring | Easy tuning | Dedicated linkup tool

In-Sight EZ-700, EZ-100 series
In-Sight 7000, Micro, 5000 series

- COGNEX products are connectable to Mitsubishi programmable controllers without any programming.
- Setup to the application is also simple, just in 4 steps.
- By supporting Ethernet as standard, multiple vision systems are connectable via a hub to the programmable controller.
- EZ-100 is the processor-equipped all-in-one vision system at 300 mm × 30 mm × 60 mm
- Applicable applications include high-resolution image identification, positioning, outer-appearance inspection, gauging and measurement, 1-D and 2-D barcode reading, and OCR/OCV.
- Operation histories can be checked and saved without stopping the system.

*Easy programming (labels) is not supported.

Cognex Corporation
URL : http://www.cognex.com Support line : +1-508-650-3000

Laser displacement sensors

A laser displacement sensor obtains object height and positional information for height adjustment in micro units.

Measuring surface variations on HDD

Surface variations of hard disk media are checked to remove any defects before proceeding to the assembly line.

Panasonic Industrial Devices SUNX Co., Ltd

Ethernet

Panasonic

Sensor controller HL-C21C(E) series
Sensor head HL-C2(E) series

Easy startup | Sensor monitoring | Backup/ restore | Easy tuning | Dedicated linkup tool

- Industry's leading-edge performance (resolution: 0.01 µm, linearity: ±0.02% F.S.)
- A wide lineup of sensor heads
  8 types of measurement center distance (8/10/15/30/50/85/110/350 mm)
- Controller connectable to 2 sensor heads

  * Capable of outputting computation results of two sensor heads.

Panasonic Industrial Devices SUNX Co., Ltd
URL : http://panasonic.net/id/pidsx/global Support line : +81-568-33-7861

OPTEX FA CO., LTD.

Bus connection

OPTEX FA

Control unit UQ1 series
Sensor head CD5 series (high accuracy type, measurement range : 30±5/85±20/150±40/350±100/500±200/2000±500 mm), CD33 series (compact type, measurement range : 30±4/50±10/85±20/120±60/250±150 mm)

Easy programming | Sensor monitoring | Dedicated linkup tool

- The control unit can be directly installed onto the programmable controller base unit, offering the connection to OPTEX FA displacement sensors. Complex communication setting is no longer required.
- Measured values are acquired, processed, analyzed and output, all at the control unit side, eliminating the need of the CPU side programs.
- "Sensor head + UQ1" reduces TCO to 1/3 compared to equivalent competitor products.
- Control unit is equipped with storage memory
- Amplifier for displacement sensor communication available (connectable to 2 heads)*

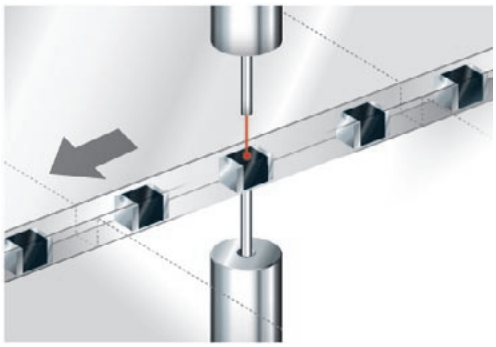
  *Future support

OPTEX FA CO., LTD.
URL : http://www.optex-fa.com/ E-mail : faovs@optex-fa.com

Fiber sensors

A fiber-optic sensor identifies objects in hostile environments including high temperature, evacuated atmosphere, and areas with chemicals.

Detecting miniature objects that are passing through



The fiber-optic sensor detects miniature objects (0402) that pass through the sensing area. Beams from ultra-thin fibers fully enter or get blocked in presence/absence of microchips.

Anywire Corporation
AnyWire

AnyWireASLINK

Easy startup | Easy programming | Sensor monitoring | Backup/ restore | Easy tuning

Fiber-optic amplifier

Fiber head

ASLINKAMP (fiber type)
B289SB-01AF series (main unit, sub units)
AFT (fiber head) series (M3, M4)

- Fiber-optic amplifier and fiber-optic head are available
- Amplifiers are directly connectable to AnyWireASLINK network
- Sensing level is continuously monitored
- The amplifier operates in time sharing with sensors, without interfering their operations

Anywire Corporation
URL : http://www.anywire.jp/ Support line: +81-75-952-8077 Open: Weekdays 9:00 am to 6:00 pm (UTC+9)

Panasonic Industrial Devices SUNX Co., Ltd

CC-Link

Panasonic

Easy startup | Easy programming | Sensor monitoring | Backup/ restore | Easy tuning

CC-Link communication unit SC-GU3-01
Digital fiber sensor FX-500 series, FX-300 series

- Connectable to versatile sensor amplifiers (for fiber optic, laser, and pressure sensors) via the CC-Link communication unit (SC-GU3-01)
- Thanks to high optical coupling efficiency, even ultra-small diameter fibers can obtain the large amount of light
- 149 types of fiber-optic heads support many inspection applications

*Affordable tough fiber optic cable with superior specification (bending radius R4, bending tolerance 10 million times)

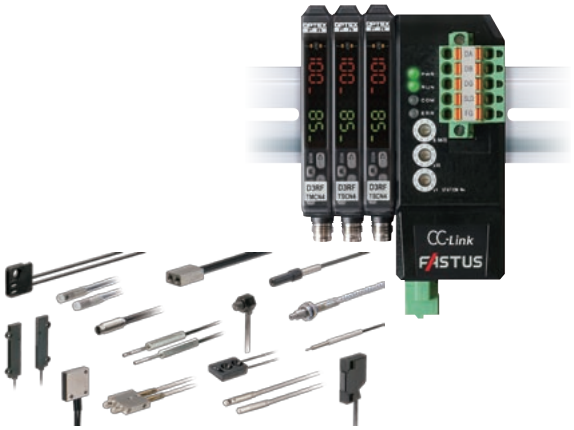
Panasonic Industrial Devices SUNX Co., Ltd
URL : http://panasonic.net/id/pidsx/global Support line : +81-568-33-7861

OPTEX FA CO., LTD.

CC-Link

OPTEX FA

Easy startup | Easy programming | Sensor monitoring | Backup/ restore | Easy tuning



CC-Link supporting communication unit UC1-CL11
High-speed digital fiber amplifier D3RF series

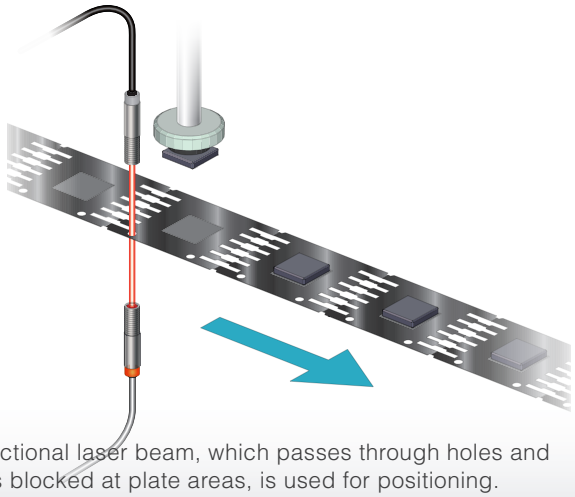
- CC-Link supporting communication unit provides connection to sensor amplifiers
- Output status can be checked, receiving light amount can be read, and setting values can also be read or written. Furthermore, teaching is also available
- Multiple fiber optic amplifiers are connectable to the connectors, saving wiring and space while reducing the system startup time
- 200 models are available, including fiber optic sensors (NF series) and high-performance affordable fiber optic amplifiers (D3RF series)

OPTEX FA CO., LTD.
URL : http://www.optex-fa.com/ E-mail : faovs@optex-fa.com

Laser sensors

Laser beams are used to identify an object in a long distance or in a crowded area to a degree which was not possible with LED beams.

Positioning of small pierced plates



Directional laser beam, which passes through holes and gets blocked at plate areas, is used for positioning.

Panasonic Industrial Devices SUNX Co., Ltd

Panasonic

CC-Link

Easy startup | Easy programming | Sensor monitoring | Backup/ restore | Easy tuning

CC-Link communication unit SC-GU3-01
Digital laser amplifier LS-500 series, LS-403
Digital laser head LS-H□ series

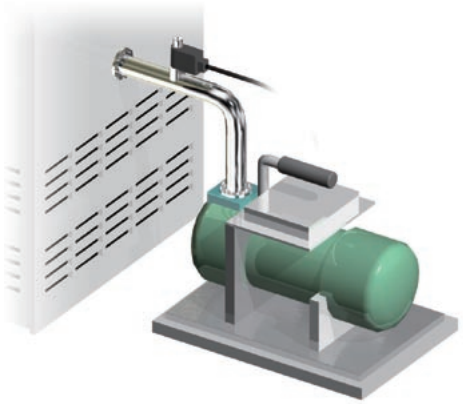
- Connectable to versatile sensor amplifiers (for fiber optic, laser, and pressure sensors) via the CC-Link communication unit (SC-GU3-01)
- Industry's smallest laser sensor head can be installed in confined spaces, which were too small for conventional sensors (Industry's smallest as of December 2014)
- All sensor head models comply with the laser class 1 (JIS/IEC/FDA)

Panasonic Industrial Devices SUNX Co., Ltd
URL : http://panasonic.net/id/pidsx/global Support line : +81-568-33-7861

Pressure sensors

A pressure sensor measures gas pressures and identifies main and absorption pressures in a system.

Monitoring the supplied gas pressure



The pressure sensor is useful in controlling compressed air supplied to the system. When supplied air decreases, the pressure also decreases to a level that turns ON the sensor.

Panasonic Industrial Devices SUNX Co., Ltd

CC-Link

Panasonic

Easy startup | Easy programming | Sensor monitoring | Backup/ restore | Easy tuning

CC-Link communication unit SC-GU3-01
Digital pressure sensor controller DPS-400 series
Digital pressure sensor head DPH-100 series

- Connectable to versatile sensor amplifiers (for fiber optic, laser, and pressure sensors) via the CC-Link communication unit (SC-GU3-01)
- DPS-400 series are the only sensor amplifiers, which are capable of transmitting displayed pressure values (digital values) via CC-Link network
- Compact sensor heads are installable from above by using a hexagonal wrench
  *Heads can be installed close to each other as they are placed from above.
- Three rated pressure ranges
  (-100.0k Pa...+100.0k Pa/0...+1.000M Pa/0...-101.0k Pa)

Panasonic Industrial Devices SUNX Co., Ltd
URL : http://panasonic.net/id/pidsx/global Support line : +81-568-33-7861

Anywire Corporation

AnyWireASLINK

AnyWire

Easy startup | Easy programming | Sensor monitoring | Backup/ restore | Easy tuning

ASLINKSENSOR (pressure type)
B284SB-0□-1K□P30

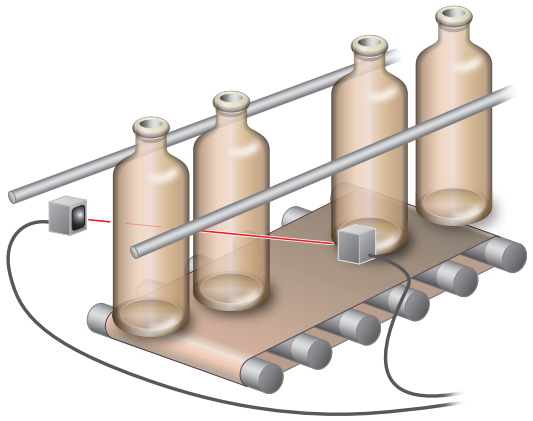
- Amplifier integrated sensors have joined the lineup
- Three rated pressure ranges (three models)
  (0...1000k Pa, 0...-100...100k Pa)
- Two sensor output types (1-point type, 2-point type)
- Directly connected to AnyWireASLINK network
- Sensing level is continuously monitored

Anywire Corporation
URL : http://www.anywire.jp/ Support line: +81-75-952-8077 Open: Weekdays 9:00 am to 6:00 pm (UTC+9)

Photoelectric sensors

A photoelectric sensor identifies objects using visible light beams.

Identifying bottles on a conveyor



Objects on a conveyor are easily identified by using photoelectric sensors, which tend to be widely available at affordable prices.

Anywire Corporation
AnyWire

AnyWireASLINK

Easy startup | Easy programming | Sensor monitoring | Backup/ restore | Easy tuning

Independent amplifier for photoelectric sensor head

Amplifier integrated sensor

- Independent amplifiers for photoelectric sensor heads, amplifier integrated sensors
  (For details of the photoelectric sensor heads, please contact Anywire Corporation.)
- Amplifiers and amplifier integrated sensors are directly connected to AnyWireASLINK network
- Sensing level is continuously monitored
- The amplifier operates in time sharing with sensors, without interfering their operations

ASLINKAMP (photoelectric type)
B289SB-01AP series (main unit, sub units)

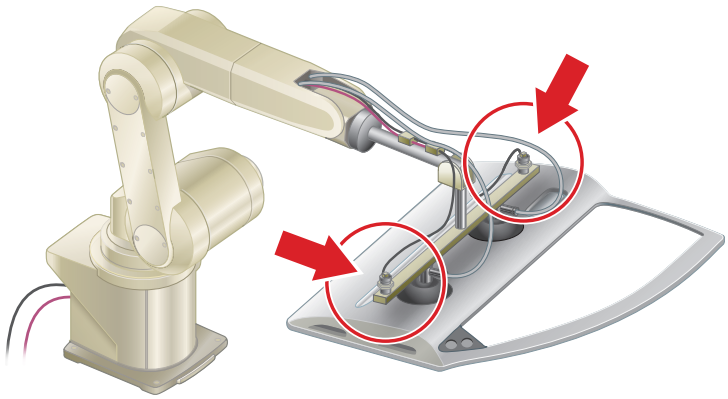
ASLINKSENSOR (photoelectric type)
B283SB series (transmission type, recurrent reflection type, spread reflection type)

Anywire Corporation
URL : http://www.anywire.jp/ Support line: +81-75-952-8077 Open: Weekdays 9:00 am to 6:00 pm (UTC+9)

Proximity sensors

A proximity sensor is a robust sensor, which detects objects in metal or other materials without any physical contact.

Detecting metal pieces for suction



A proximity sensor can detect metal pieces in hostile environment. One example is door holding (suction) in a car assembly line.

Anywire Corporation
AnyWire

AnyWireASLINK

Easy startup | Easy programming | Sensor monitoring | Backup/ restore | Easy tuning

Independent amplifier for proximity sensor head

Amplifier integrated sensor

- Independent amplifiers for proximity sensor heads, amplifier integrated sensors (M8, M12, M18, and M30)
  (For details of the proximity sensor head, please contact Anywire Corporation.)
- Amplifiers and amplifier integrated sensors are directly connected to AnyWireASLINK network
- Sensing level is continuously monitored
- The amplifier operates in time sharing with sensors, without interfering their operations
- Amplifier integrated type has the IP67-supporting structure with oil-proof cables

ASLINKAMP (proximity type)
B289SB-01AK series (main unit, sub units)

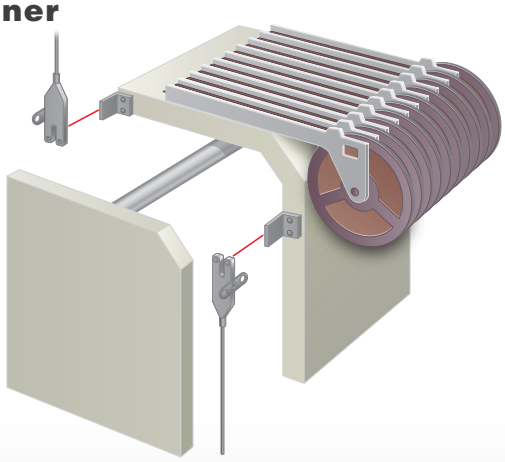
ASLINKSENSOR (proximity type)
B295SB series (M8, M12, M18, M30)

Anywire Corporation
URL : http://www.anywire.jp/ Support line: +81-75-952-8077 Open: Weekdays 9:00 am to 6:00 pm (UTC+9)

Photointerrupters

A photointerrupter identifies objects using visible light beams. Photointerrupters are compact and installable in confined spaces.

Detecting the tail of a microchip container

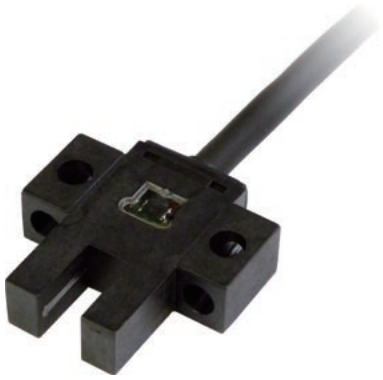


Compact and slim photointerrupters are installable in confined spaces for tail detection.

Anywire Corporation
AnyWire

AnyWireASLINK

Easy startup | Easy programming | Sensor monitoring | Backup/ restore | Easy tuning



ASLINKSENSOR (photointerrupters type)
B297SB series

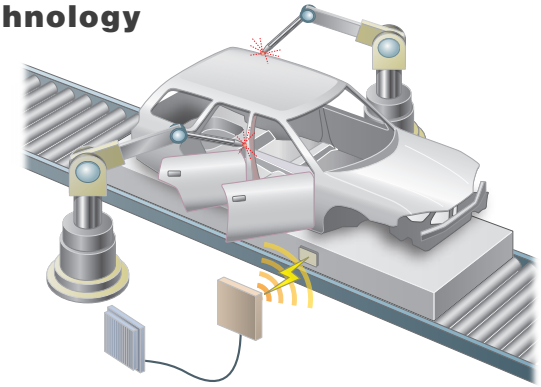
- Amplifier integrated photointerrupters can be directly connected to AnyWireASLINK network
- Sensing level is continuously monitored

Anywire Corporation
URL : http://www.anywire.jp/ Support line: +81-75-952-8077 Open: Weekdays 9:00 am to 6:00 pm (UTC+9)

RFID

Radio-frequency identification (RFID) technology uses wireless communication to identify and control objects attached with RFID tags.

Car assembly line using RFID technology



RFID tags containing car type, process history, and operation instructions are attached to each trolley. At each process, pre-installed antennas automatically receive such information from the RFID tags on the trolleys.

Mitsubishi Electric Engineering Co., Ltd.

CC-Link

MEE

Easy startup | Easy programming | Sensor monitoring

1-channnel RFID interface unit for Omron's V680 series RFID system (ECL2-V680D1)

- RFID interface units are installable as CC-Link remote device stations for distributed control
- Equipped with test and measurement functions required for startup and maintenance
- RFID interface units enable connections to Omron's V680 series RFID systems (all antennas and RFID tags)
- Function block (FB) library, which simplifies programming, is available

Mitsubishi Electric Engineering Co., Ltd.
URL : http://www.mee.co.jp/sales/fa/meefan/english

Balluff Co., Ltd

Future release

CC-Link

BALLUFF

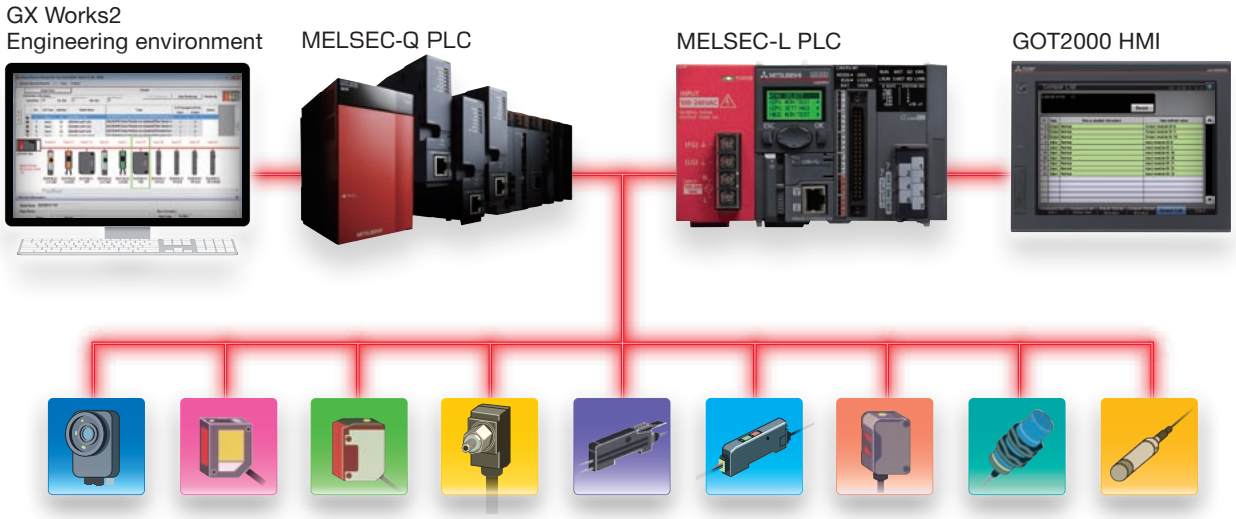
RFID processor BIS V-6111-073-C003

- Robust IP65 housing that withstands outdoor installation
- Up to 4 read/write heads can be connected
- Read/write heads for HF and LF bands can be simultaneously used
- Equipped with IO-Link port for further expansions
- Speeds up 128 KB data transmission by up to 8 times

Balluff Co., Ltd
URL : http://www.balluff.jp

See P.25 for a list of compatible models

iQSS Configuration Chart



List of compatible models

○ : Compatible – : Incompatible

Product	Manufacturer	Series/Model	Connection method				
			AnyWire ASLINK	CC-Link	CC-Link IE Field Network	Ethernet	Bus connection*1
Vision system	Cognex Corporation	In-Sight EZ-700, EZ-100 series In-Sight 7000, Micro, 5000 series * Supports In-Sight firmware version 4.9 and onwards * In-Sight EZ-700 and EZ-100 series are only sold in certain countries and areas.	–	–	–	○	–
Laser displacement sensors	Panasonic Industrial Devices SUNX Co., Ltd.	Sensor controller HL-C21C(E) series HL-C21C(E) (NPN type), HL-C21C(E)-P (PNP type)	–	–	–	○	–
		Sensor head for HL-C2(E) series HL-C201A(E)(-MK), HL-C201A(E)-SP2(M), HL-C201A(E)-SP3(M), HL-C203B(E)(-MK), HL-C205B(E)(-MK), HL-C205C(E)(-MK), HL-C211B(E)(-MK), HL-C211C(E)(-MK), HL-C235B(E)(-MK), HL-C235C(E)(-MK), HL-C235CE-W(MK)					
	OPTEX FA CO., LTD.	Control unit UQ1 series UQ 1-01 (Dedicated unit for CD5 series), UQ 1-02 (Dedicated unit for CD33 series)	–	–	–	–	○
		Sensor head CD5 series CD5-L25, CD5-LW25, CD5-30, CD5-W30, CD5-85, CD5-W85, CD5-150, CD5-W150, CD5-W350, CD5-W500, CD5-W2000					
		Sensor head CD33 series CD33-30 series, CD33-50 series, CD33-85 series, CD33-120 series, CD33-250 series, CD33-L30 series, CD33-L50 series, CD33-L85 series					
Fiber sensors	Panasonic Industrial Devices SUNX Co., Ltd.	CC-Link communication unit*2 SC-GU3-01 * Uses separate sensor head	–	○	–	–	–
		Digital fiber sensor amplifier FX-300 series FX-301, FX-305					
		Digital fiber sensor amplifier FX-500 series FX-501, FX-502					
	OPTEX FA CO., LTD.	CC-Link communication unit UC1-CL11 * Uses separate sensor head	–	○	–	–	–
		High-speed digital fiber amplifier D3RF series					
	Anywire Corporation	ASLINKAMP main unit B289SB-01AF-CAM20-V	○	–	–	–	–
		ASLINKAMP sub units B289SB-01AF-CAS-V					
		AFT-4 M4 (Radius 30), AFT-1 M3 (Radius R20), AFT-2 M3 (Radius R25), AFT-1-1 M3 (Radius R20, Heat resistance 100°C)					

○: Compatible －: Incompatible

Product	Manufacturer	Series/Model	Connection method				
			AnyWire ASLINK	CC-Link	CC-Link IE Field Network	Ethernet	Bus connection*1
 Laser sensors	Panasonic Industrial Devices SUNX Co., Ltd	CC-Link communication unit*2 SC-GU3-01 * Uses separate sensor head (choice of three models)	－	○	－	－	－
		Digital laser amplifier LS series LS-500 series, LS-403					
 Pressure sensors	Panasonic Industrial Devices SUNX Co., Ltd.	CC-Link communication unit*2 SC-GU3-01 * Uses separate sensor head (Choice of three models)	－	○	－	－	－
		Digital pressure sensor DPS-400 series DPS-401, DPS-402					
	Anywire Corporation	ASLINKSENSOR (Positive pressure sensor) B284SB-01-1KPP30, B284SB-02-1KPP30	○	－	－	－	－
		ASLINKSENSOR (Negative pressure sensor) B284SB-01-1KNP30, B284SB-02-1KNP30					
		ASLINKSENSOR (Compound pressure sensor) B284SB-01-1KLP30, B284SB-02-1KLP30					
 Photoelectric sensors	Anywire Corporation	ASLINKAMP main unit B289SB-01AP-CAM20	○	－	－	－	－
		ASLINKAMP sub units B289SB-01AP-CAS					
		ASLINKSENSOR (Transmission type) B283SB-PC-SET (P, C set type), B283SB-01-1KP (Light-projecting) B283SB-01-1KC (Light-receptive)	○	－	－	－	－
		ASLINKSENSOR (Recurrent reflection type) B283SB-01-1KR-V	○	－	－	－	－
		ASLINKSENSOR (Diffuse reflection type) B283SB-01-1KS	○	－	－	－	－
 Proximity sensors	Anywire Corporation	ASLINKAMP main unit B289SB-01AK-CAM20	○	－	－	－	－
		ASLINKAMP sub units B289SB-01AK-CAS					
		ASLINKSENSOR B295SB-01-1K26 (M 18 full thread), B295SB-01-1K25 (M 12 full thread), B295SB-01-1K27 (M 30 full thread), B295SB-01-1K24 (M 8 full thread)	○	－	－	－	－
 Photo-interrupters	Anywire Corporation	ASLINKSENSOR B297SB-01-1K40 (Standard model)	○	－	－	－	－
 RFID	Mitsubishi Electric Engineering Company Ltd.	Interface unit ECL2-V680D1	－	○	－	－	－
	OMRON Corporation	Head unit V680 series					
 Analog units	Panasonic Industrial Devices SUNX Co., Ltd.	CC-Link communication unit*2 SC-GU3-01 * Uses separate analogue output device	－	○	－	－	－
		Analog input unit SC-A01, SC-A02, SC-T1JA					

For the applicable products, refer to page 14 to 24.

*1: Used loaded into the I/O slot in a MELSEC-Q series base unit.

*2: Additionally use a cascading connector unit (SC-71), an end unit (SC-GU3-EC), and the computer software (SC-PC1).

- Refer to the iQ Sensor Solution Reference Manual (SH-081133ENG) for information on the supported versions of each product.
- Refer to the manual for each product for detailed product specifications.

Product	Manufacturer	Series/Model	Connection method				
			AnyWire ASLINK	CC-Link	CC-Link IE Field Network	Ethernet	Bus connection*1
PLC	Mitsubishi Electric Corporation	MELSEC-Q series Q00JCPU, Q00UJCPU, Q00CPU, Q00UCPU, Q01CPU, Q01UCPU, Q02CPU, Q02HCPU, Q02UCPU, Q03UDCPU, Q03UDECPU, Q04UDHCPU, Q04UDEHCPU, Q06HCPU, Q06UDHCPU, Q06UDEHCPU, Q10UDHCPU, Q10UDEHCPU, Q12HCPU, Q13UDHCPU, Q13UDEHCPU, Q20UDHCPU, Q20UDEHCPU, Q25HCPU, Q26UDHCPU, Q26UDEHCPU, Q50UDEHCPU, Q100UDEHCPU	○*2*3	○*3*4	–	–	–
		MELSEC-Q series Q02PHCPU, Q06PHCPU, Q12PHCPU, Q12PRHCPU, Q25PHCPU, Q25PRHCPU	○*2*3	–	–	–	–
		MELSEC-Q series Q03UDVCPU, Q04UDVCPU, Q04UDPVCPU, Q06UDVCPU, Q06UDPVCPU, Q13UDVCPU, Q13UDPVCPU, Q26UDVCPU, Q26UDPVCPU	○*2	○*4	–	–	–
		MELSEC-L series L02SCPU, L02SCPU-P	○*2*3	○*3*4	○*3*5	–	–
		MELSEC-L series L02CPU, L02CPU-P, L06CPU , L06CPU-P, L26CPU, L26CPU-P	○*2	○*4	○*5	○*6	–
		MELSEC-L series L26CPU-BT, L26CPU-PBT	○*2	○	○*5	○*6	–
		MELSEC-Q series Master/local module (for CC-Link) QJ61BT11N	–	○	–	–	–
		MELSEC-L series Master/local module (for CC-Link) LJ61BT11	–	○	–	–	–
		MELSEC-L series Master/local module (for CC-Link IE Field Network) LJ71GF11-T2	–	–	○	–	–
		MELSEC-Q series Master module (for AnyWireASLINK) QJ51AW12AL	○	–	–	–	–
		MELSEC-L series Master module (for AnyWireASLINK) LJ51AW12AL	○	–	–	–	–
		MELSEC-F series Master module (for AnyWireASLINK) FX3U-128ASL-M	○*3	–	–	–	–
		CC-Link—AnyWireASLINK Bridge module NZ2AW1C2AL	○	○	–	–	–
		CC-Link IE Field Network —AnyWireASLINK Bridge module NZ2AW1GFAL	○	–	○	–	–
Engineering tools	Mitsubishi Electric Corporation	GX Works2 SW1DNC-GXW2	○	○	○	○	–
		iQ Works SW2DND-IQWK	○	○	○	○	○
GOT	Mitsubishi Electric Corporation	GOT2000 series (GT27, GT25)	○*7*8	○*7	–	○*7	–
		GOT1000 series (GT16, GT15, GT14*9)	○*7	○*7	–	○*7	–

*1: Used loaded into the I/O slot in a MELSEC-Q series base unit.
*2: Requires AnyWireASLINK master unit (sold separately).
*3: Back-up/restore function is not supported because SD memory cards are not supported.
*4: Requires CC-Link system master local unit (sold separately).
*5: Requires CC-Link IE Field Network master local unit (sold separately).
*6: Only when the CPU has a built-in Ethernet port.(Ethernet module with built-in Ethernet ports do not support the network.)
*7: Supplied as sample imaging data, including sequencers, to the system makeup. A dedicated application to monitor and operate iQSS-compatible devices will be available in the future.
*8: Use [iQSS Utility] of the dedicated software to enable programmable controllers to monitor and control iQSS supporting devices.
*9: GT14 only supports AnyWireASLINK.

- Refer to the iQ Sensor Solution Reference Manual (SH-081133ENG) for information on the supported versions of each product.
- Refer to the manual for each product for detailed product specifications.

Related catalogs

Programmable Controllers MELSEC-Q series [QnU]

L(NA)08101E

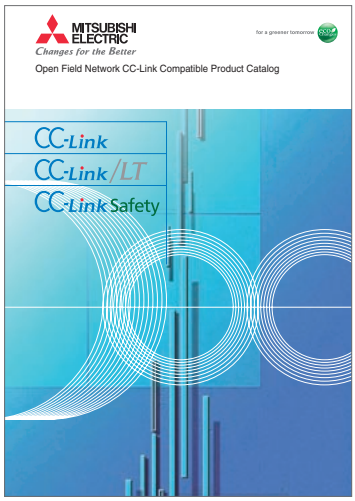
Programmable Controllers MELSEC-L series

L(NA)08159E

MITSUBISHI & Anywire

L(NA)08221E

Open Field Network CC-Link Compatible Product Catalog



L(NA)08038E

Ethernet-based Open Network CC-Link IE Product Catalog

L(NA)08111E

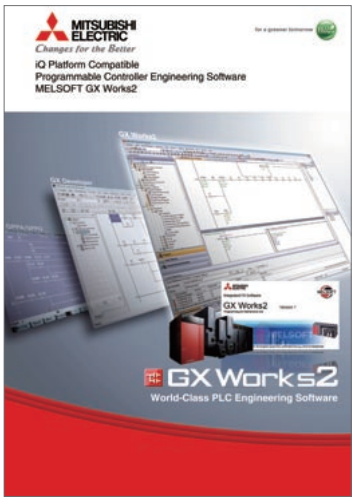
Mitsubishi Graphic Operation Terminal GOT2000 Series

L(NA)08270ENG

Mitsubishi iQ Platform Compatible FA Integrated Engineering Software MELSOFT iQ Works

L(NA)08232ENG

iQ Platform Compatible Programmable Controller Engineering Software MELSOFT GX Works2



L(NA)08122E

Partner company contact information

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■ OPTEX FA CO., LTD.

URL : http://www.optex-fa.com/
Customer Support Center (Technical Assistance Desk)
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Kyoto Head Office : Chudoji Awatacho 91, Shimogyo, Kyoto, 600-8815, Japan Tel : +81-75-325-1314

■ Mitsubishi Electric Engineering Co., Ltd.

URL : http://www.mee.co.jp/sales/fa/meefan/english

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This publication explains the typical features and functions of the products herein and does not provide restrictions and other information related to usage and module combinations. Before using the products, always read the product user manuals. Mitsubishi Electric will not be held liable for damage caused by factors found not to be the cause of Mitsubishi Electric; opportunity loss or lost profits caused by faults in Mitsubishi Electric products; damage, secondary damage, or accident compensation, whether foreseeable or not, caused by special factors; damage to products other than Mitsubishi Electric products; and to other duties.

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- Before using the products for special purposes such as nuclear power, electric power, aerospace, medicine or passenger movement vehicles, consult with Mitsubishi Electric.
- The products have been manufactured under strict quality control. However, when installing the products where major accidents or losses could occur if the products fail, install appropriate backup or fail-safe functions in the system.

CC-Link IE CC-Link MELSOFT

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USA	MITSUBISHI ELECTRIC AUTOMATION, INC. 500 Corporate Woods Parkway, Vernon Hills, IL 60061, U.S.A.	Tel : +1-847-478-2100 Fax : +1-847-478-2253
Mexico	MITSUBISHI ELECTRIC AUTOMATION, INC. Mexico Branch Mariano Escobedo #69, Col. Zona Industrial, Tlalnepantla Edo, C.P.54030, Mexico	Tel : +52-55-3067-7500
Brazil	MITSUBISHI ELECTRIC DO BRASIL COMÉRCIO E SERVIÇOS LTDA. Rua Jussara, 1750-Bloco B Anexo, Jardim Santa Cecilia, CEP 06465-070, Barueri-SP, Brasil	Tel : +55-11-4689-3000 Fax : +55-11-4689-3016
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Mitsubishi Electric Corporation Nagoya Works is a factory certified for ISO 14001 (standards for environmental management systems) and ISO 9001(standards for quality assurance management systems)

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