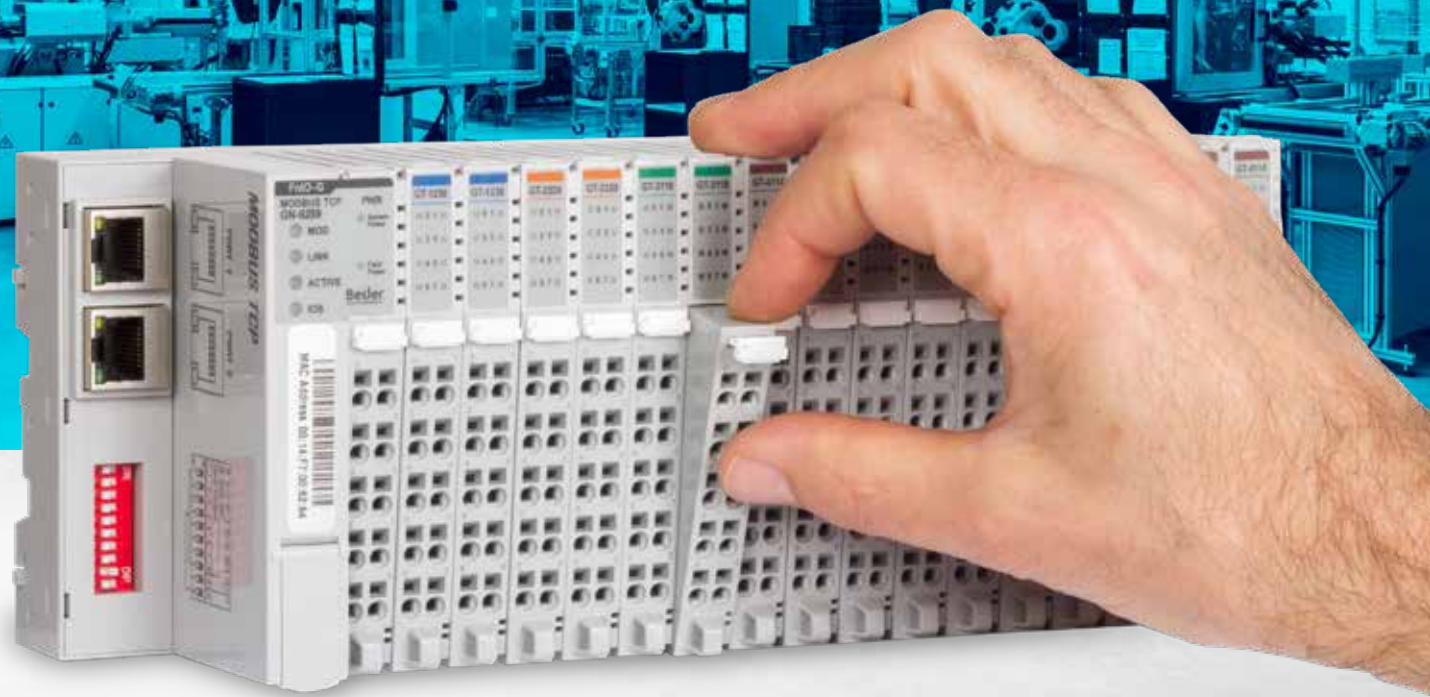


G series

Distributed IO for smart solutions
and CODESYS control



Distributed IO for smart solutions and CODESYS control

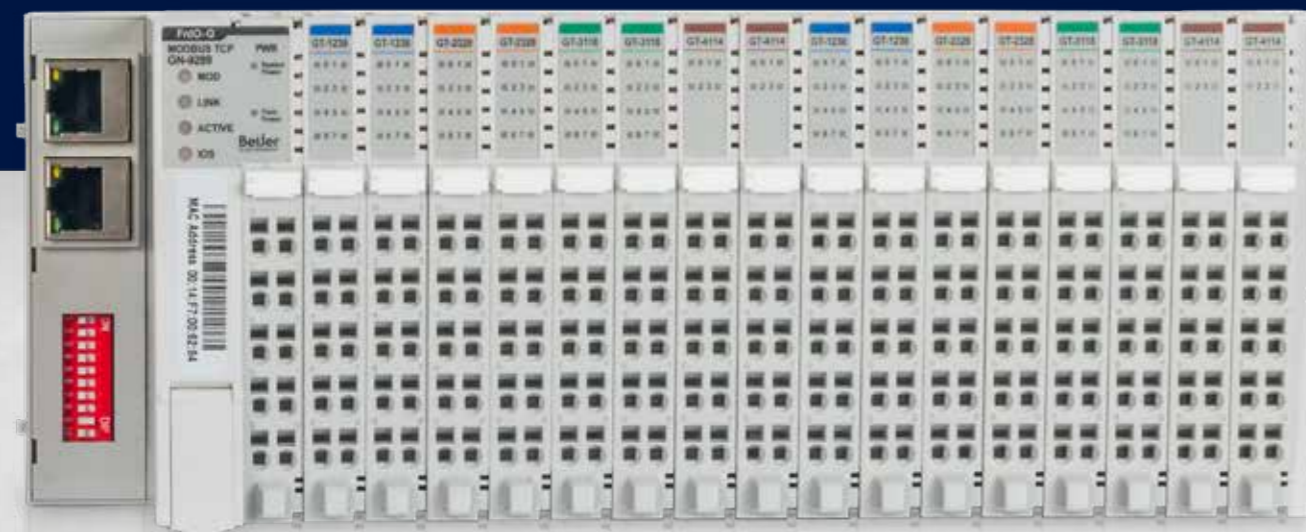
The G series distributed IOs provide you with supreme field and bus connectivity for smart integrated solutions through a wide range of digital, analog and special modules for almost any signal type.

Communicate effectively with overlying systems or other equipment via widely used communication protocols by combining slice I/Os with a network adapter module to match your requirements.

Whatever configuration you choose you can easily advance to a powerful distributed CODESYS control solution. G series CODESYS controller modules support MODBUS TCP and RTU protocols. And with the powerful CODESYS software platform you'll enjoy program speed every bit as fast as the classic PLC.

The G series conforms to CE, UL and FCC standards making it suitable for tough industrial applications anywhere.

Using WARP Engineering Studio, you can configure IO nodes and create smart integrated solutions utilizing the full scope of the G series in combination with other Beijer Electronics products.



Full connectivity

Communicate effectively with other equipment or systems via widely used industrial communication protocols. G series network adapters offer Ethernet interface as a programming port.



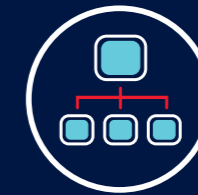
Plug in, plug out

The IO modules feature removable terminal blocks (RTB). Unplug the RTB, release the DIN rail lock and slide off the module you want to exchange. Insert the new one, lock – and plugin the RTB with all wiring fixed. Done.



Fully certified

The G series conforms to CE, UL and FCC standards making it suitable for tough industrial applications anywhere.



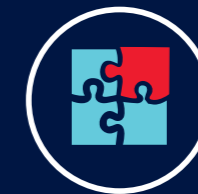
Build to size

Build your system to the exact size, specifications and IO signals for your needs. An IO node can be expanded from just a few slices up to 63 slices when needed.



Advance to CODESYS control

Upgrade your distributed IO solution to an advanced CODESYS control solution simply by replacing the standard network adapter with a CODESYS controller module.



Integrated solutions

The G series perfectly complements our range of hardware and software products enabling you to create integrated solutions and control, connect and present data.

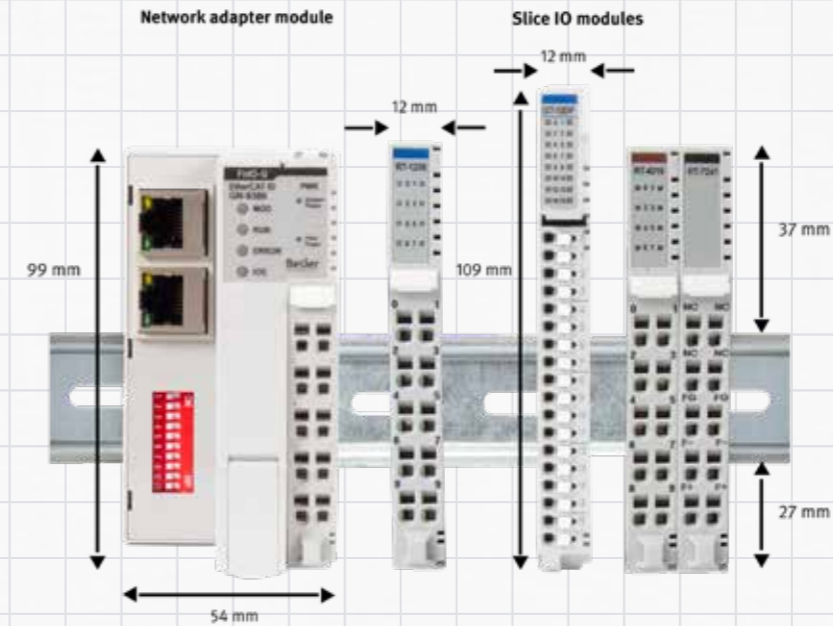
G series for extended performance

The G series offers better performance than standard IOs. Higher IO and network scan frequency and a wide range of industrial certifications lets you operate safely in tough industrial applications.



Beauty – in the details

Clever details make installation, service and modification less complicated. G series IO nodes are easily mounted on a standard 35mm DIN rail with removable cage clamp connection terminals. The modules are spring-loaded, so all you need to do is apply light, fingertip pressure and you're connected. You can remove a terminal block without having to disconnect all the wires of the module.



Space saving
We made sure you could fit up to 1,000 IOs in an 800 mm DIN rail. A slim standard module is just 12 mm wide and the network adaptor 42 mm.

1 16 connections per slice
Take advantage of having many IO channels in a compact space.

2 Removable terminal block (RTB)
Exchange modules without disconnecting wires. Plug back in and you're good to go again.

3 Release button for RTB
Easy to mount, connect or remove RTB with light fingertip pressure

7 Field bus connector
Seamlessly exchange and share data via major industrial communication protocols.

8 Color coded modules
Get a clear visual identification of module type at an instant.

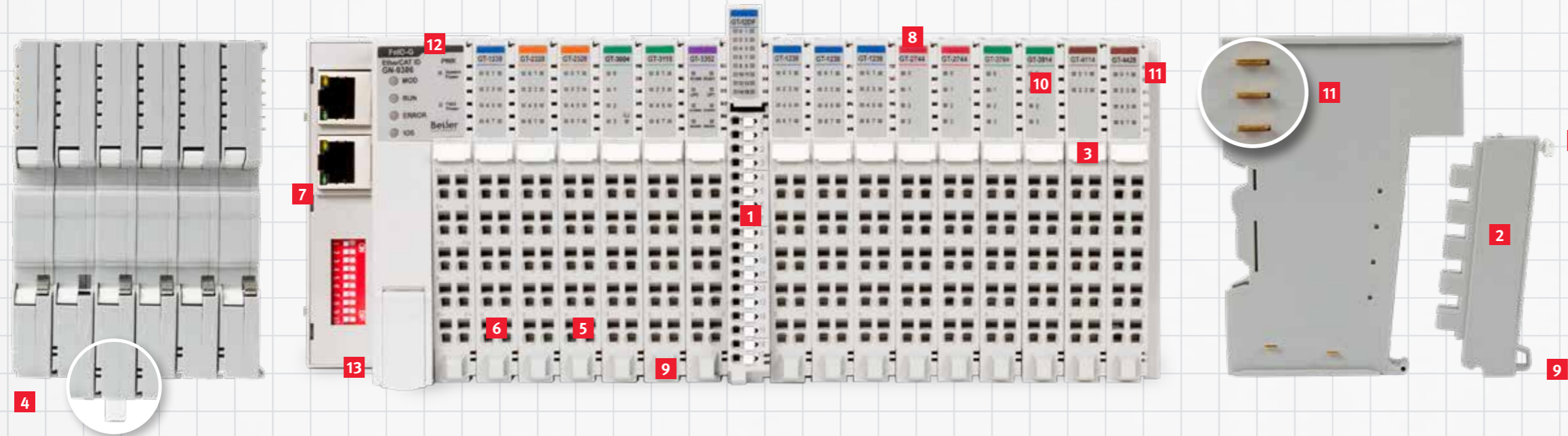
9 Cable suspension
Fasten cables on each RTB for supreme stability.

10 LED indicators
Give full visual overview of module and IO status.

11 Unique sliding contact system
Guarantees a stable connection between IO modules.

12 Expand up to 63 slices per node
A truly scalable solution that can grow with you. The G series is expandable with up to 63 slices per node.

13 Fast 1ms/63 modules scan time
The G series offers extremely high speed based on the internal module bus for applications requiring fast response.



4 Locking mechanism for DIN-rail
Secure installation that brings mechanical stability to the node.

5 Simple module exchange
Release just one module at a time while the others remain in place.

6 Cage clamp connection terminals
Install with ease for a truly safe connection.

Solutions for all industries

The G series perfectly complements Beijer Electronics products which are based on open system solutions and shared key technologies. Combined with modern user-friendly software such as WARP Engineering Studio, iX HMI software and the CODESYS programming tool, you can create smart solutions with all parts working perfectly together.

Extreme environments – bring it on!

With more than 30 years of experience designing and manufacturing HMI solutions, we offer you distributed IOs ready to operate in industrial environments with all major certifications.

Mix and match

Create solutions on a hardware platform of your choice using our product portfolio. The G series works equally well in a modular PLC solution, in HMI solutions with integrated CODESYS motion and control, and in a distributed control solution.

No need to re-invent the wheel

Get a transparent solution and save valuable engineering time using libraries and standard program codes. Once in place you can reuse and move applications from one product platform to another.

Reliable communication

Communicate reliably with all your other systems. We offer world-leading IP-based data communication products such as routers, switches, modems and converters made to endure both industrial settings, and the harshest environments.

“ We base our products on open system solutions and shared key technologies. Integrate with any application, system or product you need.

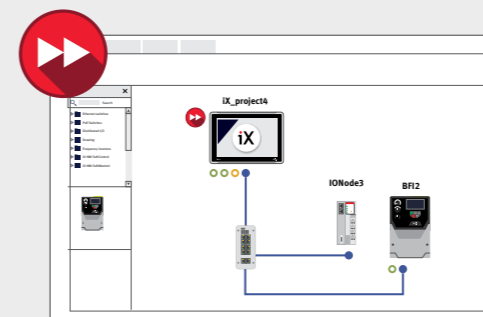


Supreme connectivity

Field and bus connectivity for industrial applications using a wide range of standard and special modules for almost any signal type.

A perfect complement

Supports our product range based on open system solutions and shared key technologies such as CODESYS, EtherCAT, iX, WARP software and more.



Fast forward engineering

Create integrated solutions with WARP Engineering Studio. WARP automatically configures all hardware, software and communication in your application. What used to take days can be up and running in a few minutes.



Advance to powerful CODESYS control

Upgrade your normal distributed IO solution to an advanced control solution by simply replacing the normal network adapter with a CODESYS controller module. A powerful CODESYS-based alternative to a traditional compact or modular PLC.

Same speed, more memory, unbeatable functionality

The G series CODESYS controller gives you program speed that's every bit as fast as the classic compact PLC. With even more memory available for your applications. CODESYS offers access to superior amounts of instructions than a conventional compact PLC. The CODESYS controller lets you create complex control applications and enjoy more functionality for your money.

Powerful CODESYS control

Fast program execution combined with generous program memory and CODESYS' large instruction set means you can create complex projects that would otherwise require a modular PLC system. This makes the distributed CODESYS controller a perfect choice for OEMs, machine builders and for other industrial applications.

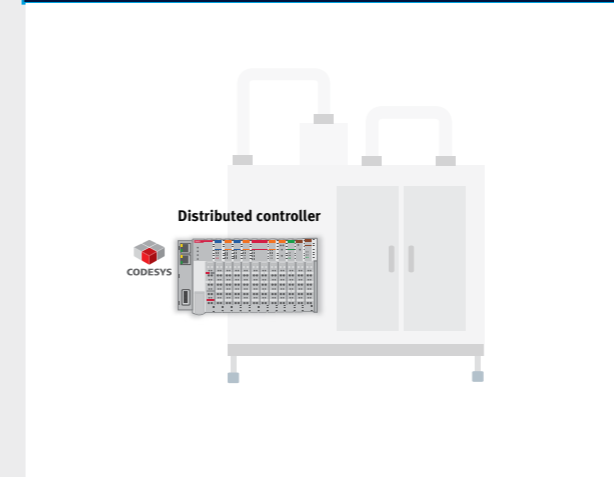


G series CODESYS controller modules

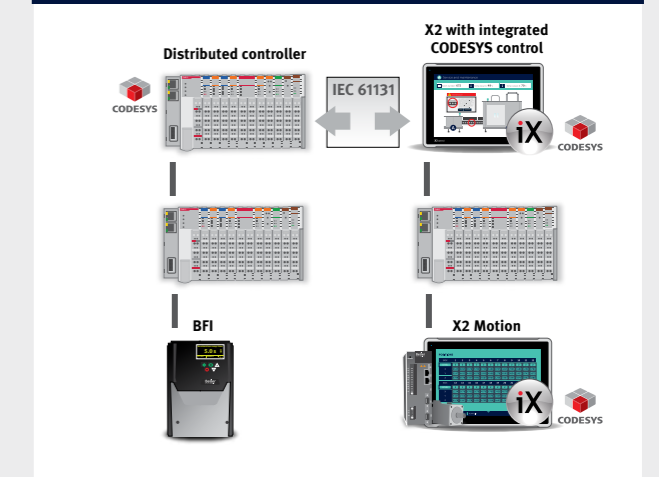
- Master & slave node (Modbus TCP)
- IEC 61131-3 program languages (LD, IL, ST, FBD, SFC)
- Multiple PLC run-time tasks
- Program, data and non-volatile memory
- OPC server
- Up to 63 expansion modules
- LED indicators for status of module, network, PLC, bus and field power

One system fits all solutions, satisfies all requirements

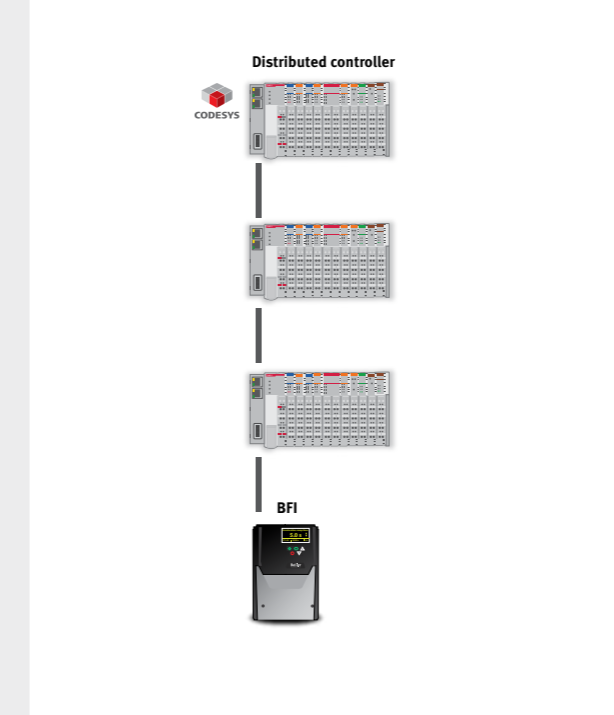
1 Stand-alone applications
A powerful IEC 61131-3 alternative to a traditional compact PLC. The perfect fit for applications with a smaller physical footprint.



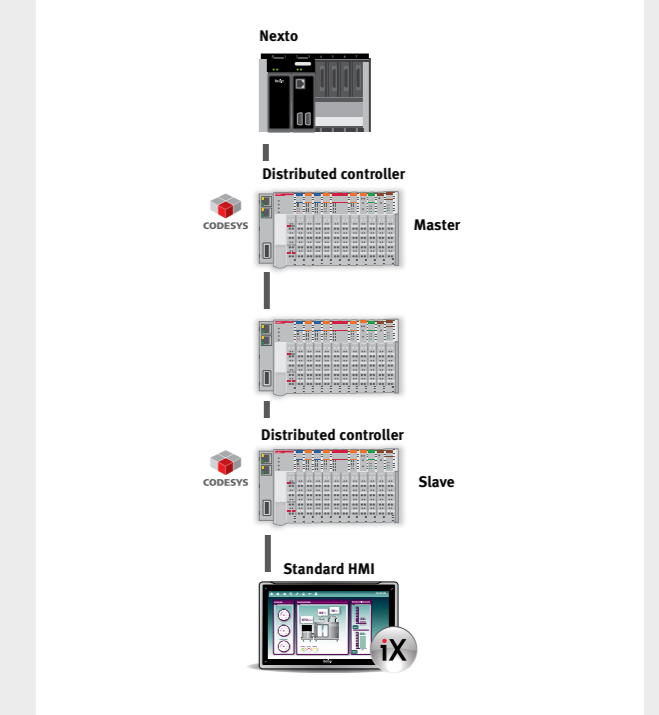
2 Same application, different platforms
Reuse or deploy the same control application on different hardware platforms, including X2 panels with integrated CODESYS motion and control.



3 Control application with distributed IO nodes
For larger applications with IO nodes located near the field devices to reduce wiring costs.



4 Master and slave applications
Perfect for modular machines or applications requiring fast local program execution where a central controller manages self-controlled sub-stations.



Mix and match to your specific needs

Connect to everything, from digital and analog input and output, to special IO signals like high-speed IOs, temperature and communication IOs.

Get the building blocks you need for the exact functionality you want. Start with a compact network adapter and add slice IO modules to fit your requirements. Easily design and configure your IO installation in WARP Engineering Studio.

Your requirements, your choice.

All modules are color-coded to make them easy to identify. Here is an overview of the modules available:



Network adapter modules			
Part no.	Type no.	Description	Replaces ¹⁾
100-8016	GN-9273	Modbus RTU network adapter, 128 bytes input and 128 bytes output, max 63 slices	NA-9173/ 9473
100-8015	GN-9289	Modbus TCP network adapter, 128 bytes input and 128 bytes output, max 63 slices	NA-9289
100-8017	GN-9386	EtherCAT network adapter, 128 bytes input and 128 bytes output, max 63 slices	NA-9286
100-8060	GN-9261	CANopen network adapter, 252 bytes input and 252 bytes output, max 63 slices	NA-9261
100-8061	GN-9222	PROFIBUS DP/V1 network adapter, 244 bytes input/244 bytes output, max 63 slices	NA-9222

CODESYS controller module			
Part no.	Type no.	Description	Replaces ¹⁾
100-8018	GN-9372	Programmable I/O with CODESYS, 16Mb application memory, file system, Modbus RTU/TCP master/slave, up to 63 slices	NA-9372 NA-9373

Digital input modules			
Part no.	Type no.	Description	Replaces ¹⁾
100-8000	GT-1238	8 digital input (24VDC), sink/source, cage clamp, 10pt removable terminal	ST-1228
100-8064	GT-12DF	16 digital input (24VDC), sink/source, cage clamp, 18pt removable connector, height 109 mm	N/A (new)
100-8003	GT-1804	4 digital input (120VAC), cage clamp, 10pt removable terminal	ST-1804
100-8004	GT-1904	4 digital input (240VAC), cage clamp, 10pt removable terminal	ST-1904

Digital output modules			
Part no.	Type no.	Description	Replaces ¹⁾
100-8005	GT-2318	8 digital output (24VDC/0.5A), sink, cage clamp, 10pt removable terminal	ST-2318
100-8006	GT-2328	8 digital output (24VDC/0.5A), source, cage clamp, 10pt removable terminal	ST-2328
100-8007	GT-2618	8 digital output (24VDC/2A), sink, cage clamp, 10pt removable terminal	ST-2618
100-8008	GT-2628	8 digital output, (24VDC/2A), source, cage clamp, 10pt removable terminal	ST-2628
100-8010	GT-2744	4 digital output relay (24VDC/2A, 240VAC/2A), cage clamp, 10pt removable terminal	ST-2744
100-8065	GT-225F	16 digital output (24VDC/0.3A), sink, cage clamp, 18pt removable terminal, height 109mm	N/A (new)
100-8066	GT-226F	16 digital output, (24VDC/0.3A), source, cage clamp, 18pt removable terminal, height 109mm	N/A (new)

Analog input modules			
Part no.	Type no.	Description	Replaces ¹⁾
100-8067	GT-3114	4 analog input (0~20/4~20mA), 12bit resolution, cage clamp, 10pt removable terminal	ST-3114
100-8036	GT-3118	8 analog input (0~20/4~20mA), 12bit resolution, cage clamp, 10pt removable terminal	ST-3118
100-8068	GT-3424	4 analog input (0~10/0~5/1~5 V), 12bit resolution, cage clamp, 10pt removable terminal	ST-3424

100-8038	GT-3428	8 analog input (0~10/0~5/1~5 V), 12bit resolution, cage clamp, 10pt removable terminal	ST-3428
100-8040	GT-3704	4 analog input RTD (PT100/PT1000/Ni1000LG), 16bit resolution, cage clamp, 10pt removable terminal	ST-3704
100-8041	GT-3708	8 analog input RTD (PT100/PT1000/Ni1000LG), 16bit resolution, 20pt connector	ST-3708
100-8044	GT-3804	4 analog input thermocouple (K/J/T/B/R/S/E/N/L/U/C/D), 16bit resolution, cage clamp, 10pt removable terminal	ST-3804
100-8048	GT-3914	4 analog input differential current (0~20/4~20/-20~20mA), 12bit resolution, cage clamp, 10pt removable terminal	N/A (new)
100-8049	GT-3924	4 analog input differential voltage (0~10/0~5/-10/-5~5V), 12bit resolution, cage clamp, 10pt removable terminal	N/A (new)

Analog output modules			
Part no.	Type no.	Description	Replaces ¹⁾
100-8025	GT-4114	4 analog output (0~20mA), 12bit resolution, cage clamp, 10pt removable terminal	ST-4114
100-8026	GT-4118	8 analog output (0~20mA), 12bit resolution, cage clamp, 10pt removable terminal	ST-4114
100-8070	GT-4424	4 analog output (0~10 V), 12bit resolution, cage clamp, 10pt removable terminal	ST-4424
100-8027	GT-4428	8 analog output (0~10 V), 12bit resolution, cage clamp, 10pt removable terminal	ST-4424

Special modules			
Part no.	Type no.	Description	Replaces ¹⁾
100-8030	GT-5112	2 channel high speed counter (up to 100kHz/24 V DC), cage clamp, 10pt removable terminal	ST-5112
100-8033	GT-5221	1 channel serial interface (RS422, 300~115 200bps), cage clamp, 10pt removable terminal	ST-5221
100-8034	GT-5231	1 channel serial interface (RS485, 300~115 200 bps), cage clamp, 10pt removable terminal	ST-5231

Power modules			
Part no.	Type no.	Description	Replaces ¹⁾
100-8019	GT-7408	Potential distributor module, 8 connections for shield, cage clamp, 10pt removable terminal	ST-7008
100-8020	GT-7508	Potential distributor module, 10 connections for 0V, cage clamp, 10pt removable terminal	ST-7508
100-8021	GT-7511	Power expansion supply module, input 24VDC, output 5VDC/1A, cage clamp, 10pt removable terminal	ST-7511
100-8022	GT-7518	Potential distributor module, 10 connections for 24VDC, cage clamp, 10pt removable terminal	ST-7518
100-8023	GT-7588	Potential distributor module, 5 connections for 0V/5 connections for 24VDC, cage clamp, 10pt removable terminal	ST-7588
100-8024	GT-7641	Field power distribution module, 24/48VDC, 110/220VAC, cage clamp, 10pt removable terminal	ST-7641

About Beijer Electronics

Beijer Electronics is a multinational cross-industry innovator of flexible solutions to control, connect and present data for business-critical applications. Our open software, hardware and IIoT solutions help customers optimize processes and create reliable secure communication, complete with leading-edge user experiences. By making the complex simple, our passion is to work together with our customers to capture the opportunities of tomorrow.

Beijer Electronics is a Beijer Group company. Beijer Group has a sale over 1.2 billion SEK in 2017 and is listed on the NASDAQ OMX Nordic Stockholm Small Cap list under the ticker BELE. www.beijergroup.com

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