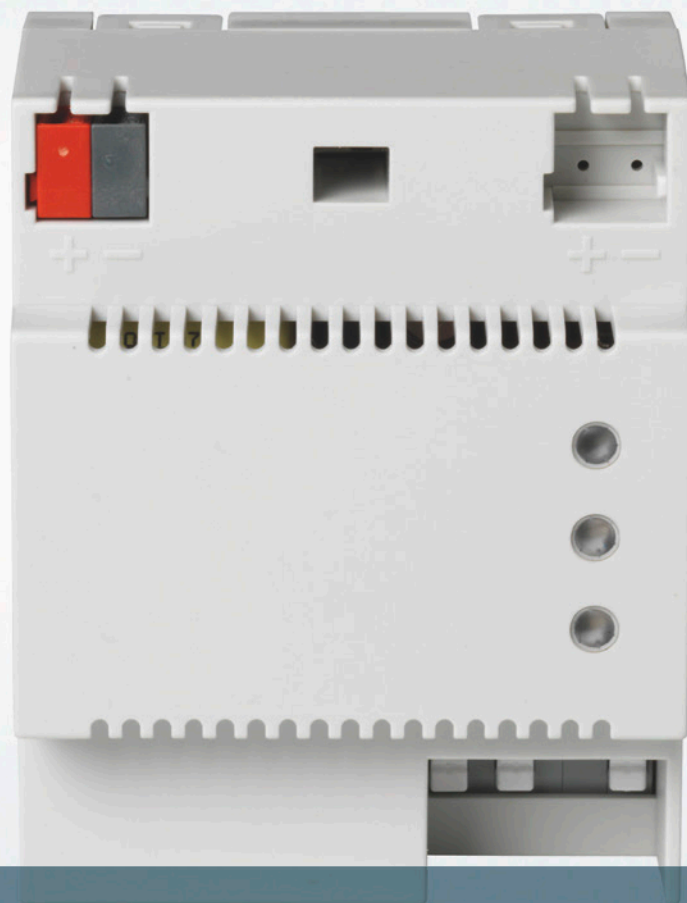


**SIEMENS**



## Gamma B2B

Building control components and finished goods  
in neutral or customized versions

The worldwide  
standard for  
home and  
building control



[www.siemens.com/gamma-b2b](http://www.siemens.com/gamma-b2b)



## Building control matches to all types of requirements

Our future-proofed building control devices enable buildings to be tailored to individual customer needs – energy-efficiently, fast and at affordable prices. The products control heating, ventilation and air conditioning plants as well as lighting systems and shading equipments.

# Future-proof, certified portfolio with worldwide KNX standard

## Certified portfolio of products from a single source

Siemens is one of the leading suppliers of building control products. Our business-to-business (B2B) portfolio includes transceivers, certified chipsets, bus interface modules plus a comprehensive range of products in neutral design. Most OEM requirements in the field of building control can thus be satisfied.

With more than 20 years of experience in this sector and as one of the core founders of the KNX standard, Siemens is a competent and reliable partner that offers full support – from the first information and offerings to training courses and technical support during development phases.

## High investment protection thanks to open communication standard

Based on the KNX technology, both highly complex solutions across all disciplines and basic solutions in the fields of room and building automation can be developed in a flexible way and matched to individual customer needs. KNX products for control of either lighting, shading, climate, energy management and security functions excel in straightforward installation. Commissioning is then facilitated by a non-proprietary tool (ETS). Last but not least KNX is an open, worldwide standard conforming to EN 50090 and the Chinese standard (GB/Z 20965).

### Highlights

- Broad product range designed to complement your portfolio
- High level of flexibility thanks to small minimum ordering quantities
- Customized versions according to your needs

## Extensive selection of products

In addition to the presently available OEM versions, other types of products in neutral design or customized versions can be supplied on request. This includes adaptation of the outer appearance of the product as well as changes in the database.

Siemens is happy to create an individual offer according to your needs. Our prod-

uct range includes actuators for the control of lighting and shading, room temperature controllers, sensors, and different types of gateways.

All products combine future-oriented design with innovative functions and ensure the highest quality standards worldwide. This way, you benefit from our in-depth technical know-how, based on decades of experience in the field of building management systems.

Our extensive product range – perfectly complementing your portfolio



# From a product in neutral design to your own brand

A few simple steps to customize a finished product

The finished products in neutral design can be easily adapted to become products with your brand name, even if only small quantities are involved. To be able to market the products under your brand name, follow these steps (a detailed description can be provided on request).

## One-time steps (product database)

1. Change the VD file using the KNX manufacturer tool (MT4):
  - Change the manufacturer code
  - In the case of complex devices, adapt the “Baggage files” (Siemens provides support)
  - Change product name, article no., and catalog grouping
  - Select the language versions – English and German are available as standard (other languages on request).

2. The adapted product requires registration by the KNX Association as a “derived product”.

## Steps to be followed for each single device

1. Change the manufacturer code and specific data: For that purpose, the device must be connected to the KNX bus. Then, call up the relevant EITT sequence provided by Siemens (EITT = KNX tool).
2. Adapt the product’s outer appearance: You can apply your own labeling and pack the product including your instructions according to your needs.

### More information:

[www.siemens.com/gamma-b2b](http://www.siemens.com/gamma-b2b)  
[gamma-b2b.i-bt@siemens.com](mailto:gamma-b2b.i-bt@siemens.com)



# A comprehensive range based on 20 years of experience

Our innovative KNX components enable you to implement a wide range of KNX products to fulfill today's customer needs.

## Transceivers

### TP-UART 2 / TP-UART 2+



The TP-UART 2 / TP-UART 2+ is the next-generation KNX transceiver. It is digitally compatible with its predecessor so that communication stacks and drivers can be used without modification. Enhanced features include efficient stabilized 3.3 V or 5 V power supply and a switchable 20 V power supply with reducible current.

Package: QFN 36  
Available current: 50 mA at 3.3 V or 5 V\* and 25 mA at 20 V

### TP-UART



The TP-UART contains the physical coupling to the KNX bus, communicating via a standard UART interface. The TP-UART relieves the microcontroller of bit coding and decoding duties and allows coupling to KNX through different microcontrollers.

Package: SOIC 20  
Available current: 10 mA at 5 V

### FZE1066



The FZE1066 transceiver offers a bit interface between the KNX bus and the application microcontroller. Designed according to the KNX specifications, development using the FZE1066 can be easily certified.

Package: SOP 20  
Available current: 30 mA at 5 V, 5 mA at 20 V

\* 30 mA only if 20 V output is used in parallel

## Chipsets

### Microcontrollers with built-in KNX stack



The 184-series NEC 78F microcontrollers already contain the BCU 2.5 system software certified to the KNX specifications. In combination with the TP-UART, it is the ideal chipset for fast development of KNX applications.

Package: 64-PIN-TQFP (fine pitch) 7x7 mm

KNX microcontroller	Memory available for the internal application program	
	Flash	RAM
184/11	16 KB	1.2 KB
184/21	48 KB	5.2 KB

## Bus interface modules (BIM)

### BIM M13...-series



The BIM M13...-series consists of the chipsets (TP-UART + KNX microcontroller) mounted on a printed circuit board with all necessary components. The M13...-series provides state-of-the-art flash technology, enabling the application designer to use modern tools and resulting in shorter development times.





The BIM M13...-series contains the BCU 2.5 system software certified to the KNX specifications.

BIM M13...-series	KNX microcontroller	Memory available for the internal application program	
		Flash	RAM
BIM M130	184/01	8 KB	200 bytes
BIM M131	184/11	16 KB	1.2 KB
BIM M132	184/21	48 KB	5.2 KB
BIM M135*	184/31	8 KB	200 bytes

\* with extended temperature range -25 °C to +70 °C

## Neutral products available on stock

	Type	Version	Order No.
<b>Pushbutton interfaces</b>			
 <p>5WG1220-2AA21</p>	UP 220/21	UP 220/21 I/O pushbutton interfaces 2 inputs/outputs	5WG1220-2AA21
<b>Anti-glare/sun protection actuators</b>			
 <p>5WG1523-1AA02</p>	N 523/02	N523/02 shutter/blind actuators 4 x 230 V AC, 6 A	5WG1523-1AA02
<b>Brightness controllers</b>			
 <p>5WG1255-4AA12</p>	AP 255/12	AP 255/12 brihtness controllers	5WG1255-4AA12
 <p>5WG1255-4AA11</p>	UP 255/11	UP 255/11 brightness controllers	5WG1255-4AA11
<b>Line/backbone couplers</b>			
 <p>5WG1140-1AA13</p>	N 140/13	N 140/13 line/backbone couplers	5WG1140-1AA13

	Type	Version	Order No.
<b>Scene/event modules</b>			
	N 305	N 305 scene/event modules	5WG1305-1AA01
5WG1305-1AA01			
<b>KNX/USB</b>			
	N 148/11	N 148/11 USB interfaces	5WG1148-1AA11
5WG1148-1AA11			
<b>KNX/IP</b>			
	N 148/22	N 148/22 IP interfaces	5WG1148-1AA22
	N 146/02	N 146/02 IP routers	5WG1146-1AA02
5WG1148-1AA22			
<b>Power supply units</b>			
	N 125/02	N 125/02 power supply units Integrated choke, 160 mA, additional unchoked output, 29 V DC	5WG1125-1AA02
	N 125/12	N 125/12 power supply units Integrated choke, 320 mA, additional unchoked output, 29 V DC	5WG1125-1AA12
	N 125/22	N 125/22 power supply units Integrated choke, 640 mA, additional unchoked output, 29 V DC	5WG1125-1AA22
5WG1125-1AA22			
<b>Chokes</b>			
	N 120/02	N 120/02 chokes 640 mA	5WG1120-1AA02
5WG1120-1AA02			
<b>Bus terminals</b>			
	193	193 bus terminals 2-pole, 4 plug-in connections, red/dark gray	5WG1193-8AB01
5WG1193-8AB01			

Siemens Switzerland Ltd  
Building Technologies Division  
International Headquarters  
Gubelstrasse 22  
6301 Zug  
Switzerland  
Tel +41 41 724 24 24  
gamma-b2b.i-bt@siemens.com

The information in this document contains general descriptions of technical options available, which do not always have to be present in individual cases. The required features should therefore be specified in each individual case at the time of closing the contract. The document contains a general product overview. Availability can vary by country. For detailed product information, please contact the company office or authorized partners.

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Our world is undergoing changes that force us to think in new ways: demographic change, urbanization, global warming and resource shortages. Maximum efficiency has top priority – and not only where energy is concerned. In addition, we need to increase comfort for the well-being of users. Also, our need for safety and security is constantly growing. For our customers, success is defined by how well they manage these challenges. Siemens has the answers.

**“We are the trusted technology partner for energy-efficient, safe and secure buildings and infrastructure.”**

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