

# 14

## GAMMA wave

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For further technical information  
please refer to the GAMMA building  
management systems manual or visit  
our Web site at:

<http://www.siemens.de/gamma>

# GAMMA wave

## General data

### Overview

GAMMA wave – the multifunctional system

Enjoy all the advantages of a modern building control system without the need for additional cable installation – the new GAMMA wave radio system makes it possible.

Sensors, actuators, etc. do not require any additional cable installation. This means that this type of radio transmission is particularly suitable for renovation work, the expansion of existing systems and all types of new installations. And all complete with absolutely fail-safe and problem-free transmission.

Furthermore:

GAMMA wave is a unique bi-directional radio system – this means that the products and components can be both transmitter and receiver.

And:

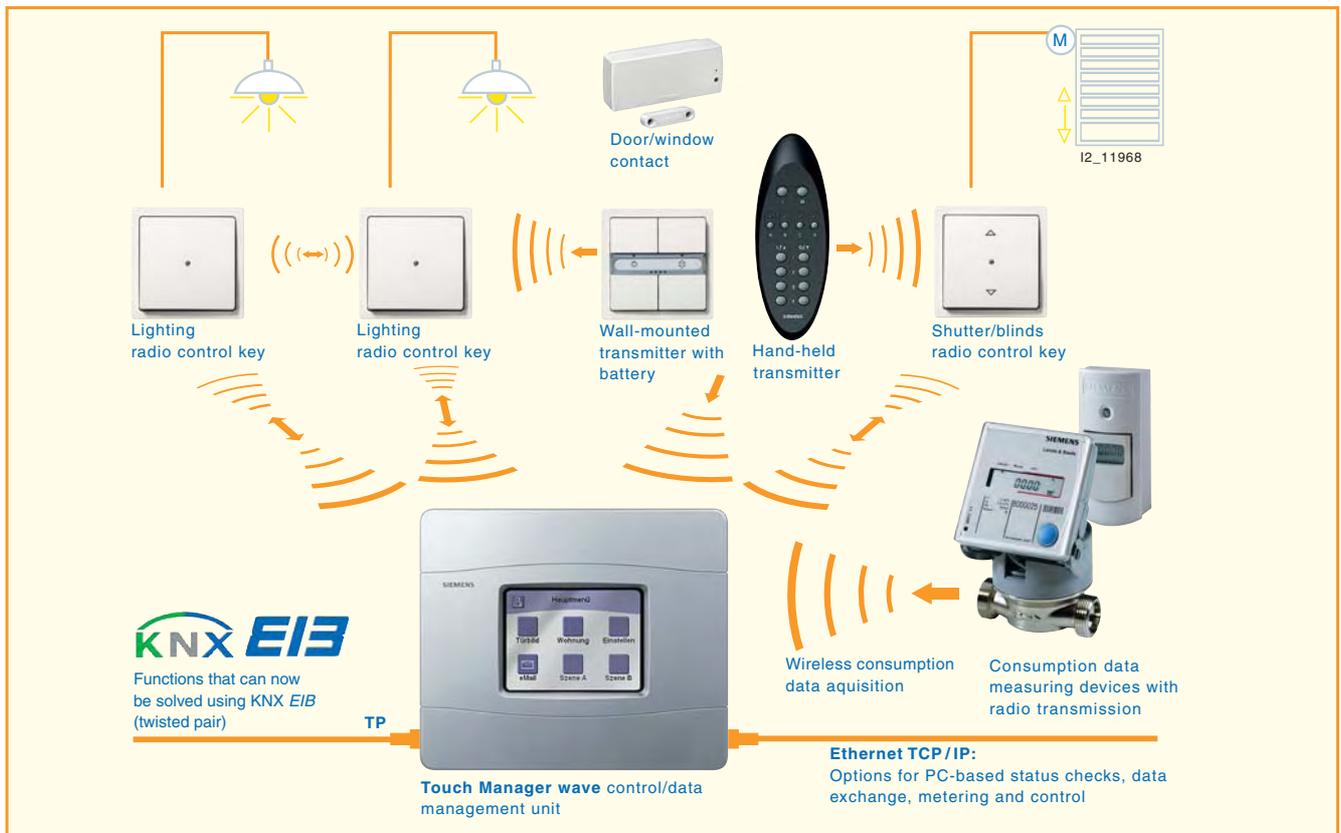
GAMMA wave is based on the new, uniform standard for building management systems KNX in the 868 MHz range.

### Services

In the range of performance of third-party systems.

### Consumption data acquisition and emergency call systems

Products of other Siemens ranges or other manufacturers on the basis of KNX standards.



### Before

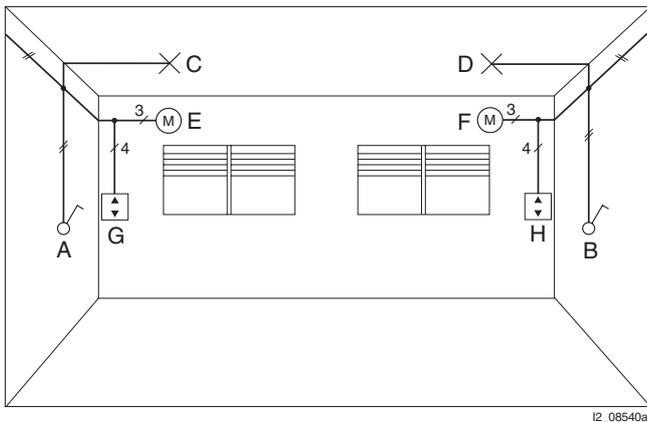
#### Lighting and shutter/blind control of a conventional installation

Example of a conventional installation with lighting and electrically operated shutters/blinds.

- Light (C) can only be switched with switch (A)
- Light (D) can only be switched with switch (B)
- Blind (E) can only be moved with switch (G)
- Switch (G)
- Blind (F) can only be moved with switch (H)
- Switch (H)

#### Disadvantages

- Inflexible
- No convenience (each light must be switched individually).



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### After

#### Lighting and shutter/blind control with GAMMA wave ("bi-directional" radio system)

Modification of the installation for shared operation of lighting and shutters/blinds from various operating points.

- Replacement of conventional switch inserts (A, B) with
  - Universal dimmer sys contact unit
  - UP 210 DELTA wave pushbutton.

Replacement of conventional shutter/blind switches (G, H) with

- Shutter/blind control sys contact unit
- UP 211 DELTA wave pushbutton shutter/blind.

With this switch you can:

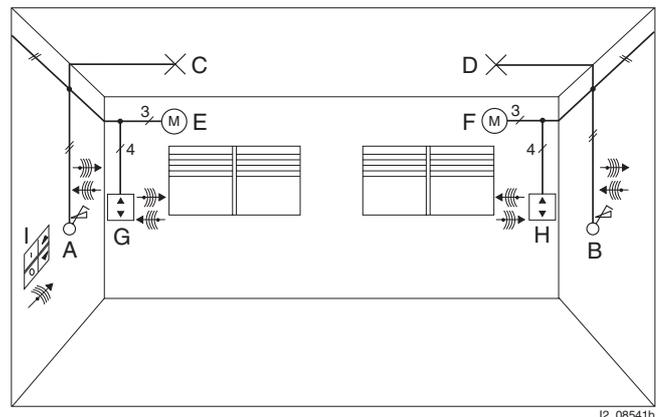
- Dim lights C and D from A and/or B
- Operate shutters/blinds E and F from G and/or H.

For additional operation of the lights and shutters/blinds,

- a UP 110 (I) wave wall-mounted transmitter battery can be installed with a mounted
  - *instabus* double pushbutton.

#### Advantages

- Flexible
- Greater operational ease
- Groups can be formed
- Fewer devices required/lower costs
- Simple and clean retrofitting - no structural alterations required.



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# GAMMA wave

## General data

Due to its implementation of future-pointing technology, the "wave" device range is ideally suited for the retrofitting and modification of room control functions in existing buildings.

These products offer simple installation and commissioning, thus enabling the wireless remote control of switching, dimming and shutter/blind/scene functions.

The system operates in the 868 MHz fail-safe frequency band that is reserved for safety and system applications. Up to 64 devices can communicate with each other in a single system (e.g. closed residential unit), whereby each radio-linked actuator channel of up to 10 sensors can be operated in different groups.

The product line includes the UP 210 DELTA wave pushbutton for lighting control, the UP 211 DELTA wave shutter pushbutton for shutter/blind control, and the UP 110 wave wall-mounted battery transmitter.

The UP 210 DELTA wave pushbutton and the UP 211 DELTA wave shutter/blind pushbutton must be used in combination with the universal dimmer sys contact units and shutter/blind control sys contact units. This enables the local operation and remote control of the inserts contained in these product lines, as well as the remote control of additional radio-linked universal dimmers or shutter/blind control sys contact units.

The *instabus* pushbutton (single or double) must be plugged as an operator interface for the UP 110 wave wall-mounted transmitter battery. In accordance with their intended purpose, the pushbutton rocker enables remote control of the universal dimmer sys contact units or shutter control sys contact units, which are equipped with the UP 210 DELTA wave pushbutton.

The device contact units are fitted with fixing claws and have a maximum mounting depth of 32 mm. This greatly facilitates mounting standard flush-mounting switch boxes.

## GAMMA wave flush-mounting combinations

Operator interfaces	DELTA sys pushbutton	UP 210 DELTA wave pushbutton	DELTA sys shutter/blind pushbutton	UP 211 DELTA wave shutter/blind pushbutton	<i>instabus</i> pushbutton, single, double
<b>Device contact units</b>					
Universal dimmer sys contact unit	X	X	-	-	-
Shutter/blind control sys contact unit	-	-	X	X	-
UP 110 wave wall-mounted battery transmitter	-	-	-	-	X
Switching sys contact unit	-	X	-	-	-
UP 110 wave wall-mounted transmitter 230 V	-	-	-	-	X
UP 560 wave wall-mounted transmitter and actuator 230 V	-	-	-	-	X

### Selection and ordering data

	Order No.	Price	PG	Weight 1 item	PS*/ P. unit
		1 item		kg	Items
 <p><b>Touch Manager wave</b> Central unit for operating and observing an electrical installation on the basis of KNX-RF with:</p> <ul style="list-style-type: none"> <li>• 5.7" touch display with background lighting</li> <li>• Real-time clock</li> <li>• Interfaces                             <ul style="list-style-type: none"> <li>- Ethernet connection</li> <li>- Radio coupling.</li> </ul> </li> </ul> <p>The following are supported:</p> <ul style="list-style-type: none"> <li>• up to 70 actuator channels from <i>EIB-TP</i> and KNX-RF devices</li> <li>• up to 40 sensor channels from <i>EIB-TP</i> and KNX-RF devices</li> <li>• up to 7 room temperature controllers (currently only available as <i>EIB-TP</i> devices) with a total of approx. 50 convenient heating periods</li> <li>• up to 16 scenes with a total of approx. 200 actuator channels and triggers (control keys of Touch Manager, external sensors or times), as well as additional direct gateway connections between GAMMA wave and GAMMA <i>instabus</i> devices.</li> </ul> <p>The exact values depend on the size of the memory available, i.e. largely from the type and number of the channels to be managed through Touch Manager.</p> <p>The following can also be displayed</p> <ul style="list-style-type: none"> <li>• alarms of smoke detector</li> <li>• images of a connected WebCam</li> <li>• the status of lighting and other switchable devices</li> <li>• the status of door/window contacts</li> <li>• the battery status and faults during communication of battery-powered KNX-RF devices</li> <li>• the quality of radio transmission of individual KNX-RF devices.</li> </ul> <p>Further functions</p> <ul style="list-style-type: none"> <li>• Date and time synchronization via <i>EIP-TP</i> or Ethernet</li> <li>• Cyclical transmission of date and time over <i>EIB-TP</i></li> <li>• Receipt and indication of outer temperatures over <i>EIB-TP</i></li> <li>• Relaying of alarms and other indications through email.</li> </ul> <p>In connection with any data terminal equipment with an Internet browser (Microsoft Internet Explorer, Version 4.0 or higher, we recommend Microsoft Internet Explorer, Version 6.0 or higher), which is connected to the same local network as Touch Manager, Touch Manager wave can be used to remotely control the connected bus system and the Touch Manager wave can be remotely parameterized. If the network is correctly equipped and configured, remote control and remote parameterization is also possible over the Internet. In this case, the special user page "My Page" can also be displayed and operated from a WAP-capable cell phone.</p> <p>In connection with a server, additional services can also be offered over Touch Manager wave. These services are only restricted by the limits of the server and the display options of the Touch Manager wave.</p> <p>The device should only be mounted in surface-mounted boxes, which can be ordered separately (Kaiser, <a href="http://www.kaiser-elektro.de">http://www.kaiser-elektro.de</a>).</p> <p>Order Nos.: Flush-mounting junction box: Order No. 1097-92 Junction box for cavity wall: Order No. 9197-91 222 x 257 x 56</p> <p><b>UP 580</b> Monochrome display</p> <p><b>UP 581</b> Color display</p> <p>Following devices also offer:</p> <ul style="list-style-type: none"> <li>• Interfaces:                             <ul style="list-style-type: none"> <li>- KNX <i>EIB-TP</i> connection</li> <li>- Date and time synchronization over KNX <i>EIB-TP</i></li> <li>- Cyclical transmission of date and time to the KNX <i>EIB-TP</i></li> </ul> </li> </ul> <p><b>UP 582</b> Monochrome display</p> <p><b>UP 583</b> Color display</p>					
	<b>5WG3 580-2AB71</b>		030	1.500	1
	<b>5WG3 581-2AB71</b>		030	1.500	1
	<b>5WG3 582-2AB71</b>		030	1.500	1
	<b>5WG3 583-2AB71</b>		030	1.500	1

\* You can order this quantity or a multiple thereof.

## Flush-mounting devices

	Order No.	Price	PG	Weight 1 item kg	PS*/ P. unit Items
 <p><b>UP 141 wave repeater</b></p> <p>The UP 141 wave repeater is a radio transmitter/receiver which is designed for mounting into a flush-mounting switch box and which transmits every properly received radio telegram again. If the radio telegrams are absorbed by several walls, ceilings or furniture in large accommodation units or houses in such a way that the assigned receiver is not able to receive them properly, a repeater is required. The repeater is supplied with voltage above 230 V.</p> <p>Modular width (mm): 71 Mounting depth (mm): 32</p> <p>The blank covering plate as well as the respective frame must be ordered separately.</p>	<b>5WG3 141-2AB01</b>		030	0.065	1
 <p><b>UP 110 wave wall-mounted battery transmitter</b></p> <p>The UP 110 wave wall-mounted battery transmitter is a radio transmitter for wireless operation of room functions, which is intended for installation in a flush-mounting switch box. An <i>instabus</i> KNX <i>EIB</i> pushbutton (single or double) is plugged in as an operator interface, which is linked to the contact unit through a 10-pole plug-in connection. The UP 110 wave wall-mounted transmitter battery can be parameterized for the following functions: switching, dimming, shutter/blind and scene. The wall-mounted transmitter is powered by a 1/2 AA 3.6V lithium battery. The battery is enclosed with the device.</p> <p>Modular width (mm): 71 Mounting depth (mm): 24 Surface-mounting enclosure, see "Accessories".</p> <p>The <i>instabus</i> KNX <i>EIB</i> pushbuttons and the corresponding frames must be ordered separately.</p>	<b>5WG3 110-2AB01</b>		030	0.050	1
 <p><b>UP 110 wave wall-mounted transmitter 230 V</b></p> <p>The UP 110 wave wall-mounted transmitter 230 V is a radio transmitter for the wireless operation of room functions which is designed for mounting into a flush-mounting switch box. An <i>instabus</i> KNX <i>EIB</i> pushbutton (single or double) is plugged in as an operator interface, which is linked to the contact unit through a 10-pole plug-in connection. The UP 110 wave wall-mounted transmitter 230 V can be parameterized for the following functions: switching, dimming, shutter/blind and scene. Power is supplied to the wall-mounted transmitter from the 230 V network.</p> <p>Modular width (mm): 71 Mounting depth (mm): 32</p> <p>The <i>instabus</i> KNX <i>EIB</i> pushbuttons and the corresponding frames must be ordered separately.</p>	<b>5WG3 110-2AB11</b>		030	0.068	1
 <p><b>UP 560 wave wall-mounted transmitter and actuator 230 V</b></p> <p>The wave wall-mounted transmitter and actuator 230 V is a radio transmitter/receiver for the wireless operation of room functions, which is additionally equipped with a switch actuator for 230 V/6 A. The device is designed for mounting into a flush-mounting switch box. An <i>instabus</i> KNX <i>EIB</i> pushbutton (single or double) is plugged in as an operator interface, which is linked to the contact unit through a 10-pole plug-in connection. The plug-on pushbutton can be parameterized for the following functions: switching, dimming, shutter/blind and scene. As an additional function, the switch actuator can be operated as a time switch with an adjustable overrun time of 1, 5 or 15 minutes.</p> <p>Rated current for ohmic load at 230 V AC: 6 A Modular width (mm): 71 Mounting depth (mm): 32</p> <p>The <i>instabus</i> KNX <i>EIB</i> pushbuttons and the corresponding frames must be ordered separately.</p>	<b>5WG3 560-2AB01</b>		030	0.074	1

## Flush-mounting devices

	Order No.	Price	PG	Weight 1 item	PS*/ P. unit
		1 item		kg	Items
<b>Switching sys contact unit</b> The sys switching insert is a flush-mounting device for switching different electrical consumers <ul style="list-style-type: none"> <li>• Incandescent lamps</li> <li>• High-voltage halogen lamps</li> <li>• Low-voltage halogen lamps with conventional transformers</li> <li>• Low-voltage halogen lamps with electronic transformers</li> </ul> It is operated by means of the UP 210 wave pushbutton (radio) <p>Product features:</p> <ul style="list-style-type: none"> <li>• 2-wire connection method</li> <li>• Short-circuit protection by microfuse</li> <li>• Spare fuse at the fuse carrier</li> <li>• Overload protection</li> <li>• Extension unit operation by conventional pushbuttons without glow lamps</li> <li>• Number of extension units: unlimited</li> <li>• Extension unit cable: max. 100 m</li> <li>• Nominal voltage: 230 V AC/50 Hz.</li> </ul> Modular width (mm): 71 Mounting depth (mm): 32					
	<b>5TC1 233</b>		024	0.110	1
Connected load: <ul style="list-style-type: none"> <li>• Incandescent lamp load 15 to 500 W</li> <li>• Conventional transformers 15 to 500 VA (with toroidal-core transformers 15 to 250 VA)</li> <li>• Electronic transformers: 15 to 500 VA</li> </ul>					
	<b>5TC1 232</b>		024	0.100	1
Connected load: <ul style="list-style-type: none"> <li>• Incandescent lamp load 25 to 250 W</li> <li>• Conventional transformers 25 to 250 VA</li> <li>• Electronic transformers 25 to 250 VA</li> </ul>					
<b>Universal dimmer sys contact unit</b> The universal dimmer sys contact unit is a flush-mounting device for switching and dimming different electric devices: <ul style="list-style-type: none"> <li>• Incandescent lamps</li> <li>• High-voltage halogen lamps</li> <li>• Low-voltage halogen lamps with conventional transformers</li> <li>• Low-voltage halogen lamps with electronic transformers</li> </ul> It is operated by means of the sys pushbutton and the UP 210 wave pushbutton (radio). <p>Product features:</p> <ul style="list-style-type: none"> <li>• 2-wire connection method</li> <li>• Automatic load detection</li> <li>• Lamp-saving soft start</li> <li>• Save and switch on at one brightness value</li> <li>• Memory value retained after power failure</li> <li>• Electronic short-circuit protection and thermal protection</li> <li>• On elimination of the short circuit/after cooling down, automatic return to normal mode</li> <li>• Secondary operation over conventional pushbuttons</li> <li>• Number of extension units: unlimited</li> <li>• Nominal voltage: 230 V AC/50 Hz.</li> </ul> Connected load: <ul style="list-style-type: none"> <li>- Incandescent lamp load 50 to 420 W</li> <li>- Conventional transformers 50 to 420 VA</li> <li>- Electronic transformers 70 to 420 VA.</li> </ul> Modular width (mm): 71 Mounting depth (mm): 32 Only mixed loads of incandescent lamp ratings and electronic transformers are permissible.					
	<b>5TC1 230</b>		024	0.089	1

## Flush-mounting devices

	Order No.	Price	PG	Weight 1 item	PS*/ P. unit
 <p><b>Shutter/blind control sys contact unit</b></p> <p>The shutter/blind control sys contact unit is a flush-mounting device for controlling shutter/blind motors with mechanical or electronic limit switches.</p> <p>It is operated using the sys shutter/blind pushbutton and the UP 211 wave shutter/blind pushbutton (radio).</p> <p>Product features:</p> <ul style="list-style-type: none"> <li>• Two electric safety locking relays with a minimum changeover time of 1 s</li> <li>• Group and central controls through combination of several shutter/blind control sys contact units</li> <li>• The "wind alarm" safety function can be implemented through the UP secondary input</li> <li>• Multiphase operation possible (i.e. different phases at the main and secondary branches)</li> <li>• Jumpering of power failures &lt; 0.2 s</li> <li>• Conventional DELTA shutter/blind pushbutton (5TA2 114) or DELTA shutter/blind switch (5TA2 154) can be connected over secondary inputs</li> <li>• Number of secondary branches: unlimited.</li> <li>• Nominal voltage: 230 V AC, 50 Hz (neutral conductor required).</li> <li>• Connected load: max. 1 motor 1000 VA.</li> </ul> <p>Modular width (mm): 71 Mounting depth (mm): 32</p>	<b>5TC1 231</b>	1 item		kg	Items
			024	0.112	1

### Selection and ordering data

	Dimensions H x W x D mm	Color	Order No.	Price 1 item	PG	Weight 1 item kg	PS*/ P. unit Items
	<p><b>AP 260 wave door/window contact with battery</b></p> <p>The AP 260 wave door/window contact is a surface-mounting device with an integrated radio transmitter which detects and wirelessly signals the opening and closing of windows and doors. Apart from the integrated reed relay contact, which is released by means of a window-attached solenoid, one or more conventional window contacts can be connected in series as well. The wave door/window contact is powered by a lithium battery (1/2 AA 3.6 V). The battery is enclosed with the device.</p>	titanium white brown	<b>5WG3 260-3AB11</b> <b>5WG3 260-3AB81</b>		030 030	0,096 0,096	1 1
	<p><b>AP 261 wave binary input with battery</b></p> <p>The AP 261 wave binary input is a surface-mounting radio transmitter with a sensor channel. Beside the integrated reed contact, which when it opens or closes causes the binary input to transmit switching commands by means of radio signals, an external contact can also be connected.</p> <p>By means of these switching commands (ON/OFF), all switchable actuators such as e.g. sys switching contact units or Universal dimmer sys contact units in combination with UP 210 wave pushbuttons as well as UP 560 wall-mounted transmitter actuators 230 V wave can be controlled.</p> <p>The current for the binary input is supplied by a lithium battery (1/2 AA 3.6 V). The battery is enclosed with the device.</p>	titanium white	<b>5WG3 261-3AB11</b>		030	0,096	1
	<p><b>S 425 wave hand-held transmitter</b></p> <p>The S 425 wave hand-held transmitter is a 17-channel radio transmitter for the wireless operation of 16 different room functions, which can be triggered by means of 4 pushbutton pairs and 4 preselection buttons. To achieve a clearer overview, a separate pushbutton pair is additionally available for a central function. The S 425 wave hand-held transmitter can be parameterized for the following functions: switching, dimming, shutter/blind and scene.</p> <p>The wave hand-held transmitter is powered by 2 batteries (LR03/AAA; 1.5 V). The batteries are included with the device.</p>	black silver	<b>5WG3 425-7AB21</b> <b>5WG3 425-7AB71</b>		030 030	0.124 0.125	1 1

\* You can order this quantity or a multiple thereof.

## Surface-mounting devices

	Dimensions H x W x D mm	Color	Order No.	Price 1 item	PG	Weight 1 item kg	PS*/ P. unit Items
 <p><b>Battery smoke detector</b> <sup>1)</sup></p> <p>The battery smoke detector is designed for use in residential areas. The smoke detector detects smoke caused by fire at an early point and will trigger an alarm. Beside stand-alone operation, it is also possible to network up to 40 smoke detectors of the same make by means of a two-wire cable.</p> <p>It is also possible to fit the smoke detector with a pluggable smoke detector module relay for external alarm sensors (e.g. horn, flashing light) or a pluggable wave uni smoke detector module for radio transmission (GAMMA wave).</p> <p>Power supply: 3 x 1.5 V alkaline mignon, AA batteries, service life up to 5 years</p> <p>Networking: up to 40 smoke detectors overall cable length of max. 400 m</p> <p>Signaling: acoustic signal generator, horn &gt; 85 dB (A) optical display, red LED</p> <p>Temperature range: 0 °C to +50 °C</p> <p>Networking terminals: max. 0.8 mm</p> <p>Installation: Surface mounting with or without spacer</p> <p>Degree of protection: IP30</p> <p>Certification: VdS approval pending</p> <p>The smoke detector can be fitted with a pluggable relay or radio module. Interconnection (networking) may only be carried out with devices of the same type, otherwise malfunction may occur.</p> <p>Ø120 mm x 44 mm</p>							
		titanium white	<b>5TC1 290</b>		024	0,352	1
		aluminum metallic	<b>5TC1 293</b>		024	0,352	1
		tobacco	<b>5TC1 294</b>		024	0,352	1
 <p><b>Smoke detector relay module</b> <sup>1)</sup></p> <p>The battery smoke detector can be additionally equipped with a relay module. The relay module enables the control of alarm devices such as e.g. horns, alarm sirens, warning lights, etc. or connection to the <i>instabus</i> KNX <i>EIB</i> building management system. The floating changeover contact (NC and NO contacts) also allows for closed-circuit protection (alarm loops with NC contact). The relay contacts form a triple clamp-type terminal.</p> <p>The voltage (3 V to 5 V) required for the relay module is supplied through the smoke detector interface.</p> <p>Operating voltage: 3 V to 5 V</p> <p>Relay switching voltage: max. 30 V DC / 42 V AC</p> <p>Relay switching current: max. 1 A DC / 0.5 A AC</p> <p>Contact assemblies: Changeover contact (NC and NO contacts)</p> <p>Terminals: max. 0.8 mm</p> <p>Installation: can only be used in battery smoke detectors</p> <p>Connection: using 8-pole plug connector</p> <p>The externally connected signaling devices must have their own power supply.</p>							
			<b>5TC1 291</b>		024	0.040	1
 <p><b>M 255 wave UNI smoke detector</b> <sup>1)</sup></p> <p>The M 255 wave UNI smoke detector module is a radio module which is plugged into the battery smoke detector.</p> <p>If a smoke alarm is triggered, an alarm will not only be output locally through the smoke detector, but will also be transmitted by radio and can be displayed and forwarded e.g. with the Touch Manager wave. The battery status of the smoke detector is also transmitted by radio.</p> <p>The power supply of the M 255 wave UNI smoke detector is through the battery smoke detector.</p> <p>63 x 38 x 15</p>							
			<b>5WG3 255-8AB01</b>		030	0.420	1

1) Available in the 1st quarter 2005.

### Selection and ordering data

Dimensions H x W x D mm	Color	Order No.	Price 1 item	PG	Weight 1 item kg	PS*/ P. unit Items
<b>UP 210 DELTA wave pushbutton</b>						
<p>The UP 210 wave shutter/blind pushbutton is a single radio system pushbutton for shutter/blind control, which is available in the DELTA profil, DELTA style, DELTA line, DELTA vita and DELTA miro programs. The pushbutton is plugged together with a corresponding frame onto a sys or universal dimmer contact unit. This enables the local operation and remote control of the insert located underneath, as well as the remote control of additional radio-linked sys contact units or universal dimmer sys contact units.</p> <p>As an additional function, the fitted insert can also be used as a time switch with an adjustable overrun time in the range of 1 to 60 minutes.</p> <p>The respective frame and the sys switchgear or Universal dimmer sys contact unit (see page 14/7) must be ordered separately.</p>						
<b>DELTA profil</b> 65 x 65 x 14						
	UP 210 wave DELTA profil pushbutton	titanium white	<b>5WG3 210-2AB11</b>	030	0.035	1
		pearl gray	<b>5WG3 210-2AB01</b>	030	0.035	1
		anthracite	<b>5WG3 210-2AB21</b>	030	0.035	1
		silver	<b>5WG3 210-2AB71</b>	030	0.035	1
<b>DELTA style</b> 68 x 68 x 16.5						
	UP 210 wave DELTA style pushbutton	titanium white	<b>5WG3 210-2GB11</b>	030	0.036	1
		basalt black	<b>5WG3 210-2GB21</b>	030	0.036	1
<b>DELTA i-system</b> 55 x 55 x 13						
	UP 210 wave DELTA i-system pushbutton	titanium white	<b>5WG3 210-2HB11</b>	030	0.030	1
		carbon metallic	<b>5WG3 210-2HB21</b>	030	0.030	1
		aluminum metallic	<b>5WG3 210-2HB31</b>	030	0.030	1
<b>UP 211 DELTA wave shutter/blind pushbutton</b>						
<p>The UP 211 wave shutter/blind pushbutton is a single radio system pushbutton for shutter/blind control, which is available in the DELTA profil, DELTA style, DELTA line, DELTA vita and DELTA miro switchgear programs. The pushbutton is plugged onto a shutter/blind control sys contact unit together with a corresponding frame. This enables local operation and remote control of the insert located underneath, as well as the remote control of additional radio-linked shutter/blind control sys contact units.</p> <p>As an additional function, the fitted insert, and any additional radio-linked inserts, can be operated with a 24-hour automatic controller. Used in conjunction with the AP 260 door/window contact, when opening the door/window, the respective blind is stopped and locked in that position.</p> <p>The corresponding frame and the shutter/blind control sys contact unit (see page 14/8) must be ordered separately.</p>						
<b>DELTA profil</b> 65 x 65 x 14						
	UP 211 wave DELTA profil shutter/blind pushbutton	titanium white	<b>5WG3 211-2AB11</b>	030	0.035	1
		pearl gray	<b>5WG3 211-2AB01</b>	030	0.035	1
		anthracite	<b>5WG3 211-2AB21</b>	030	0.035	1
		silver	<b>5WG3 211-2AB71</b>	030	0.035	1
<b>DELTA style</b> 68 x 68 x 16.5						
	UP 211 wave DELTA style shutter/blind pushbutton	titanium white	<b>5WG3 211-2GB11</b>	030	0.035	1
		basalt black	<b>5WG3 211-2GB21</b>	030	0.035	1
<b>DELTA i-system</b> 55 x 55 x 13						
	UP 211 wave DELTA i-system shutter/blind pushbutton	titanium white	<b>5WG3 211-2HB11</b>	030	0.035	1
		carbon metallic	<b>5WG3 211-2HB21</b>	030	0.030	1
		aluminum metallic	<b>5WG3 211-2HB31</b>	030	0.030	1

\* You can order this quantity or a multiple thereof.

## DELTA sys pushbutton

### Selection and ordering data

	Dimensions H x W x D mm	Color	Order No.	Price 1 item	PG	Weight 1 item kg	PS*/ P. unit Items
<b>DELTA sys pushbutton</b>							
The DELTA sys pushbutton is used to operate the universal dimmer sys contact unit. Depending on the actuation of the pushbutton (UP, DOWN, CENTER), information transmission is implemented over the specific 230 V user interface (230 V PEI). The corresponding frame and the universal dimmer sys contact unit (see page 14/7) must be ordered separately.							
	<b>DELTA profil</b> 65 x 65 x 14						
	DELTA profil sys pushbutton	titanium white	<b>5TC1 310</b>		024	0.048	1
		pearl gray	<b>5TC1 311</b>		024	0.048	1
		anthracite	<b>5TC1 312</b>		024	0.048	1
		silver	<b>5TC1 313</b>		024	0.048	1
		champagne	<b>5TC1 314</b>		024	0.048	1
	bronze	<b>5TC1 315</b>		024	0.048	1	
	tobacco	<b>5TC1 316</b>		024	0.050	1	
	<b>DELTA style</b> 68 x 68 x 16.5						
	DELTA style sys pushbutton	titanium white	<b>5TC1 317</b>		024	0.050	1
		basalt black	<b>5TC1 318</b>		024	0.050	1
	<b>DELTA i-system</b> 55 x 55 x 13						
	DELTA i-system sys pushbutton	titanium white	<b>5TC1 301</b>		024	0.043	1
		carbon metallic	<b>5TC1 302</b>		024	0.043	1
		aluminum metallic	<b>5TC1 303</b>		024	0.043	1
<b>DELTA sys shutter/blind pushbutton</b>							
The DELTA sys shutter/blind pushbutton is used to operate the shutter/blind control sys contact unit. Depending on the actuation of the pushbutton (UP, DOWN), information transmission is implemented over the specific 230 V user interface (230 V PEI). The corresponding frame and the shutter/blind control sys contact unit (see page 14/8) must be ordered separately.							
	<b>DELTA profil</b> 65 x 65 x 14						
	DELTA profil sys shutter/blind pushbutton	titanium white	<b>5TC1 330</b>		024	0.035	1
		pearl gray	<b>5TC1 331</b>		024	0.035	1
		anthracite	<b>5TC1 332</b>		024	0.035	1
		silver	<b>5TC1 333</b>		024	0.035	1
		champagne	<b>5TC1 334</b>		024	0.050	1
	bronze	<b>5TC1 335</b>		024	0.050	1	
	tobacco	<b>5TC1 336</b>		024	0.050	1	
	<b>DELTA style</b> 68 x 68 x 16.5						
	DELTA style sys pushbutton Shutter	titanium white	<b>5TC1 337</b>		024	0.035	1
		basalt black	<b>5TC1 338</b>		024	0.035	1
	<b>DELTA i-system</b> 55 x 55 x 13						
	DELTA i-system sys pushbutton shutter/blind	titanium white	<b>5TC1 321</b>		024	0.035	1
		carbon metallic	<b>5TC1 322</b>		024	0.035	1
		aluminum metallic	<b>5TC1 323</b>		024	0.035	1
<b>Accessories</b>							
	<b>M 110 surface-mounting enclosure</b>						
	Surface-mounting enclosure for UP 110 wave wall-mounted transmitter battery in DELTA profil design. The corresponding frame must be ordered separately.						
	80 x 80 x 30 mm	pearl gray	<b>5WG3 110-8AB01</b>		030	0.048	1
		titanium white	<b>5WG3 110-8AB11</b>		030	0.048	1
		anthracite	<b>5WG3 110-8AB21</b>		030	0.048	1
	silver	<b>5WG3 110-8AB71</b>		030	0.048	1	



# GAMMA wave

Notes

