SIEMENS

Gamma Lighting Control – Cabinet Devices

Photo	Description	Product Number[a]	Dimensions[b]	Current or Power Draw on KNX Bus	Bus Connection: Terminal Block	Bus Connection: Data Rail	Product Features	Product Features	External Power Supply Required	Notes	Documentation Product Numbers: Technical Product Info (TPI)	Install Instructions (BMA)	Application Program Description (APB)
Output Devices							**Capacity/Ratings**						
	KNX/DALI Gateway (N 141/02) Supports up to 64 DALI devices.	5WG1 141-1AB02	4 MW (2.83" [72 mm])	9 mA	✓	✓	Max. 64 DALI devices		AC/DC 110-240V, 50-60 Hz, 7 watts	Do not connect to voltages greater than 240V; use a separate 110-240V source.	154-102	A5E02193513A	981C0C
	Relay Module (N 512) 8 independent load switches for on/off control of eight separate groups of electric devices.	5WG1 512-1CB01	8 MW (5.67" [144 mm])	10 mA	✓	✓	8 circuits, each rated: 120 - 277 Vac, 20A 347 Vac, 15A 50/60 Hz			UL Listed ratings: • 15 A @ 347 Vac (General Purpose) • 15 A @ 347 Vac Ballast (200µF max.) • 20 A @ 277 Vac (General Purpose) • 20 A @ 277 Vac (Ballast (200µF max.) • 1.5 HP @ 120 Vac (Motor) • 3 HP @ 277 Vac (Motor)	2515014169	2515014169	908301
	Blind/Shutter/Motor Controller (N 523/04) 4 load outputs. Provides manual control of blinds/shades from a switch or touchscreen. Provides automatic sunlight tracking control when paired with a weather station.	5WG1 523-1CB04	4 MW (2.83" [72 mm])	5 mA	✓	✓	120 Vac, 6A (resistive load)		120 Vac	Circuits A and B share a common line connection, which must be 120 Vac, and is required. Circuits C and D share a common line connection, which may be any voltage ≤ 120 Vac.	154-125	A5E02444230A	981202
	Switching/Dimming Actuator (N 526E/02) 8 outputs for on/off and 1 to 10 Vdc dimming control of up to eight groups (channels) of lamps.	5WG1 526-1EB02	8 MW (5.67" [144 mm])	30 mA	✓	✓	8 circuits, each rated: 120 - 277 Vac, 20A 347 Vac, 15A 50/60 Hz			UL Listed ratings: • 15 A @ 347 Vac (General Purpose) • 15 A @ 347 Vac (Ballast) • 20 A @ 277 Vac (General Purpose) • 20 A @ 277 Vac (Ballast) • 1.5 HP @ 120 Vac (Motor) • 3 HP @ 277 Vac (Motor) • Current sinking: 36 mA • Dimmable electronic ballast: max. 60 ballasts at 0.6 mA ea.	154-101	2515434132	981301
Input Devices							**Inputs**						
	Binary Input Module (N 261) Four inputs for monitoring low voltage inputs. Each input can be assigned various tasks depending on the application program used.	5WG1 261-1CB01	2 MW (1.42" [36 mm])	3 mA		✓ Data Rail 190/*x* required	**Voltage:** AC/DC 24V **Current (per circuit):** • 3.5 mA (24 Vac) • 6 mA (24 Vdc)		✓ (see *Notes*)	Monitored outputs must provide 24V AC/DC. To monitor dry contacts, provide an external 24V AC/DC power supply, or use Pushbutton Interface 5WG1 220-2AB*x* 1.	us203a_n261	us203a_n261	240505: On/off 220703: On/off, Dim/shutter/value 240A01: Value
See also *Push Button Interfaces (UP 220/x1)* on the *Field Devices* poster.		5WG1 220-2A*x* 1											
Computer Interface							**Network Connections and Functions**						
	USB Interface (N 148/11) Enables a computer to be attached to its built-in USB socket for addressing, ETS configuration, visualizing, logging, and diagnosis of all KNX bus devices.	5WG1 148-1AB11	1 MW (0.71" [18 mm])	4 mA	✓	✓					154-112	251515.41.60	700002
	IP Interface (N148/22) Connects a computer running ETS or visualization software to KNX. RJ-45 socket. Offers concurrent access to the bus line from up to five computers or other data processing equipment for ETS configuration, visualizing, logging, and diagnosis of all KNX bus devices.	5WG1 148-1AB22	2 MW (1.42" [36 mm])	5 mA (If powered from N125/21, total power draw is 62 mA.)	✓		• 10Base-T (10 Mbps) • Supports KNXnet/IP • Simultaneous connections: – Tunneling : 4 – Object server: 1		✓ (see *Notes*)	Use one of the following: • 29 Vdc from Power Supply (N 125/21) • PoE is supported: 0.8 W • SELV or NEC Class 2 power supply, AC/DC 24V 1.2 W When Power Supply (N 125/21) or an external 24V supply is used, current draw is 57 mA.	154-110	A5E02444759	720001
	IP Controller (N 350E) Connects a computer running ETS or visualization software to KNX. RJ-45 socket, includes IP interface/timer/scheduler/event/scene controller. Provides up to 80 objects for use as schedule functions, input for logic gates, event triggers, or output of event programs (scenes). Displays date and time.	5WG1 350-1EB01	4 MW (2.83" [72 mm])	See footnote *g*	✓		• 10Base-T (10 Mbps) • Supports KNXnet/IP • Simultaneous connections: – Tunneling : 1 – Object server: 1 • Weekly scheduling • Yearly time switching • Real time clock	**Logic Functions** • Inputs (virtual): 80 • Outputs: 30 • User-def logic gate: 30 **Event Functions** • Event entries: 200 • Event trigger: 30 • Sequence Ctrl: Y, incl. 17:46 timer **Objects Suported** • 1 bit • 1 byte • 2 byte • 4 byte	✓ (see *Notes*)	Use one of the following: • 29 Vdc from Power Supply (N 125/21) • SELV or NEC Class 2 power supply, AC/DC 24V 1.75 W When Power Supply (N 125/21) or an external 24V supply is used, current draw is 79 mA.	154-121	251503.41.70	908701
	IP Viewer (N 151) Used to view and control KNX devices using an Internet browser. RJ-45 socket. Incorporates a Web server for operating and monitoring KNX systems.	5WG1 151-1AB01	4 MW (2.83" [72 mm])	See footnote *g*	✓		• 10Base-T (10 Mbps) • Supports KNXnet/IP • Simultaneous connections: – Tunneling : 1 – Object server: 1 • Web server supported		✓ (see *Notes*)	Use one of the following: • 29 Vdc from Power Supply (N 125/21) • SELV or NEC Class 2 power supply, AC/DC 24V 1.75 W When Power Supply (N 125/21) or an external 24V supply is used, current draw is 79 mA.	154-113	A5E01251112	909510
	IP Control Center (N 152) Used to view and control KNX devices using an Internet browser. Webserver for standard browsers. Includes: time scheduler, logic module, alarm function with e-mail notices and scene event recall.	5WG1 152-1AB01	4 MW (2.83" [72 mm])	See footnote *g*	✓		• 100Base-T (100 Mbps) • Supports KNXnet/IP	**Time Scheduler:** Up to 300 time events per week. **Logic Functions:** 1000 **Alarm Messages:** 250 alarm messages to 20 e-mail addresses.	✓ (see *Notes*)	Use one of the following: • 29 Vdc from Power Supply (N 125/21) • SELV or NEC Class 2 power supply, AC/DC 24V nominal, current draw is 1.2 watts at 24 Vdc	2.11.1.15	L1V30048994A	983501
See also *IP Router (N146/02)* in the *Line Coupler* section.		5WG1 146-1AB02											
See also *Siemens BACnet Gateway (N 143)* in the *Gateway* section.		5WG1 143-1AB01											
Power Supply Unit							**Input Voltage**	**Output Rating**					
	Power Supply Unit (N 125/01) 160 mA, with integrated choke.	5WG1 125-1AB01	4 MW (2.83" [72 mm])		✓	✓	120 to 230 Vac, 50/60Hz	29 Vdc, 160 mA			2.14.4.3	251504.41.22	–
	Power Supply Unit (N 125/11) 320 mA, with integrated choke.	5WG1 125-1AB11	4 MW (2.83" [72 mm])		✓	✓	120 to 230 Vac, 50/60Hz	29 Vdc, 320 mA			2.14.4.3	251504.41.22	–
	Power Supply Unit (N 125/21) 640 mA, with integrated choke, with additional 29 Vdc unchoked output.	5WG1 125-1AB21	4 MW (2.83" [72 mm])		✓	✓	120 to 230 Vac, 50/60Hz	29 Vdc, 640 mA		Provides separate 29 Vdc output, which can be used to power devices requiring a separate power supply. Device output 640 mA total, including devices on KNX network and devices powered from 29 Vdc output.	251504.41.23	251504.41.23	–
	Choke (N 120/02) For operation with a Power Supply Unit without integrated choke, or for connection to the unchoked output of the Power Supply Unit N 125/21.	5WG1 120-1AB02	2 MW (1.42" [36 mm])		✓	✓				Required if yellow/white connector from Power Supply (N 125/21) is used to power a second line.	154-100	2515044115	–
Data Rails and Accessories													
	Bus Connection Terminal (193) 2-pole, 4 plug-in connector, red/dark gray. Can only be ordered in increments of 25.	5WG1 193-8AB01								Used as spares. A Bus Connection Terminal (193) is included with all Gamma devices that use these connectors.	–	–	–
	Data Rails with Integrated Connector (190/*x* 2) Must be ordered in multiples of 5. Integrated connector for KNX network wiring. Terminals may be reconfigured for right or left mounting. 24 mm (0.94") wide.									Needed to support devices that only have a Data Rail bus connection (N 261, N301, N 341, N 347, N 350). Install Power Supply on the Data Rail to provide KNX bus to modules without a KNX terminal. *Optional part:* Cover Strip for Data Rail (192).	154-103	2515054115	–
	190/02, 214 mm, usable width 11 MW	5WG1 190-8AB02	214 mm (8.4")										
	190/12, 243 mm, usable width 12 MW	5WG1 190-8AB12	243 mm (9.6")										
	190/22, 277 mm, usable width 13 MW	5WG1 190-8AB22	277 mm (10.9")										
	190/32, 324 mm, usable width 17 MW	5WG1 190-8AB32	324 mm (12.8")										
	190/42, 428 mm, usable width 23 MW	5WG1 190-8AB42	428 mm (16.9")										
	190/52, 464 mm, usable width 25 MW	5WG1 190-8AB52	464 mm (18.3")										
	Data Rail without Connector (190/*x* 1) Must be ordered in multiples of 5. 24 mm (0.94") wide.									Needed to support devices that only have a Data Rail bus connection (N 261, N301, N 341, N 347, N 350). Install Power Supply on the Data Rail to provide KNX bus to modules without a KNX terminal. *Optional parts:* REG 191/01 or REG 191/11, Cover Strip for Data Rail (192).	–	–	–
	190/01, 214 mm, 12 MW	5WG1 190-8AB01	214 mm (8.4")										
	190/11, 243 mm, 14 MW	5WG1 190-8AB11	243 mm (9.6")										
	190/21, 277 mm, 16 MW	5WG1 190-8AB21	277 mm (10.9")										
	190/31, 324 mm, 18 MW	5WG1 190-8AB31	324 mm (12.8")										
	190/41, 428 mm, 24 MW	5WG1 190-8AB41	428 mm (16.9")										
	190/51, 464 mm, 26 MW	5WG1 190-8AB51	464 mm (18.3")										
	Data Rail Connector (REG 191/01) Bus connection only (2-wire), UL 916. Most common application. Provides connection for KNX network wiring (red/black connector) to Data Rails without Connector (190/*x* 1).	5WG1 191-5AB01	1 MW (0.71" [18 mm])		✓	✓ Data Rail 190/*x* required				REG 191/01 or REG 191/11 is required if Data Rail 190-8ABx 1 is used, and no device on the rail has both Terminal Block and Data Rail connectors.	251505.41.06	251505.41.06	–
	Data Rail Connector (REG 191/11) Bus & power connections (4-wire), UL 916. Provides connection for KNX network wiring (red/black connector) and power (yellow/white connector) to Data Rails without Connector (190/x1).	5WG1 191-5AB11	1 MW (0.71" [18 mm])		✓	✓ Data Rail 190/*x* required				REG 191/01 or REG 191/11 is required if Data Rail 190-8ABx1 is used, and no device on the rail has both Terminal Block and Data Rail connectors.	251505.41.12	251505.41.12	–
	Cover Strip for Data Rail (192) Used to cover unused portions of the data rail to prevent contact with the rail.	5WG1 192-8AA01	9.5" (242 mm)							Can be cut to fit.	–	–	–
	Surge Suppressor Bus Termination Block To be used where the occurrence of noise levels >2 kV is expected due to the topology and electromagnetic environment of the KNX system.	5WG1 190-8AD01								Not orderable through SAP. Contact Customer Service.	1166	1166	–
Event/Logic Modules							**Logic Functions**	**Event and Scene Functions**					
	Logic Module (N 301) Applies logic operations to group addresses received. Selected applications support partition control.	5WG1 301-1AB01	1 MW (0.71" [18 mm])	4 mA		✓ Data Rail 190/*x* required	• AND • Invert • Partition control	N/A		Applications 740A01, 740B01 and 740C01 are used for combining/separating switch commands based on up to 16 combinations of position of up to 4 movable partitions.	154-122	251503.41.13	720101: 8 in/2 out AND logic. 740301: 4 in/4 out binary inverter. 740A01: 8 1-bit (on/off). 740B01: 8 1-byte (value) signals. 740C01: 4 1-bit (on/off) and 4 dimming (up/down) signals. 740D01: 4 channels. Converts 2 inputs per channel to high priority command for compatible outputs.
	Scene or Event Controller (N 305) Provides either scene control or event program functions.	5WG1 305-1AB01	1 MW (0.71" [18 mm])	9 mA	✓	✓	N/A	**Events** • Event entries: 80 • Event trigger: 8 **Scenes:** Scene control: 8		Only configurable for either scene or event control—the device will not support both concurrently.	154-118	A5E01224022A	750005
	Event Module (N 341) Used to define and process event programs and schedule programs.	5WG1 341-1AB01	1 MW (0.71" [18 mm])	8 mA		✓ Data Rail 190/*x* required	N/A	**Events** • Event tasks: 200 • Event trigger: 100 • Sequence control: Y, incl. 2-hour timer. • 400 calendar tasks usable in up to 150 date programs. **Objects Suported** • 1 bit • 1 byte • 2 byte • 4 byte			154-119	2515034134	800A06
	Logic Module (N 347) Makes it possible to perform AND, OR, NAND, and NOR logic operations.	5WG1 347-1AB02	1 MW (0.71" [18 mm])	8 mA		✓ Data Rail 190/*x* required	• 255 objects which may be allocated as inputs or outputs. • Up to 127 logic gates can be defined.	N/A		Supports binary (1-bit) objects only.	154-120	2515034143	800C10
	Event-Schedule-Logic Controller (N 350) Provides event programs, schedule programs (weekly scheduler), and logic functions.	5WG1 350-1AB01	1 MW (0.71" [18 mm])	8 mA		✓ Data Rail 190/*x* required	**Inputs:** 60 **Outputs:** 10 **User-defined logic gate:** 10	**Events** • Event entries: 100 • Event trigger: 10 • Sequence Ctrl: Y, incl. 1:48 timer. • 20 schedule objects controllable by up to 100 day/time schedules. **Objects Suported:** 1 bit		Supports binary (1-bit) objects only.	251503.41.45	251503.41.45	801701
See also IP Controller (N 350E) in the Computer Interface section.		5WG1 350-1EB01											
See also *Touch Panel (UP 588/23)* on the *Field Devices* poster.		5WG1 588-2AB23											
Line/Backbone Couplers[c]							**Network Connections and Functions**						
	Line/Backbone Coupler (N 140/03) Provides a data connection between two KNX bus lines and also isolates those bus lines from each other so that each bus line operates independently. Can be used as a line coupler, backbone coupler or repeater in KNX networks.	5WG1 140-1AB03	1 MW (0.71" [18 mm])	• 6 mA on primary line • 8 mA on secondary line	✓[d]	✓[e] Data Rail 190/*x* required				Primary line provides power for the device.	154-109	2515.08.41.20	000121 (coupler) 000221 (repeater)
	Line/Backbone Coupler (N 140/13) Provides a data connection between two KNX bus lines and also isolates those bus lines from each other so that each bus line operates independently. Can be used as a line coupler, backbone coupler or repeater in KNX networks.	5WG1 140-1AB13	2 MW (1.42" [36 mm])	• 6 mA on primary line • 8 mA on secondary line	✓[f] (2)						154-109	2515.08.41.32	000121 (coupler) 000221 (repeater)
	IP Router (N146/02) Connects KNX lines to Ethernet/IP. May be used to connect a computer running ETS to KNX for downloading. Also offers concurrent access to the bus line from up to four computers or other data processing equipment for ETS configuration, visualizing, logging, and diagnosis of all KNX bus devices.	5WG1 146-1AB02	2 MW (1.42" [36 mm])	6 mA (If powered from N 125/21, total power draw is 63 mA.)	✓		• 10Base-T (10 Mbps). • Supports KNXnet/IP. • Simultaneous connections: – Tunneling : 4 – Object server: 1 • Line coupler (routing) supported.		✓ (see *Notes*)	Use one of the following: • 29 Vdc from Power Supply (N 125/21) • PoE is supported: 0.8 W • SELV or NEC Class 2 power supply, AC/DC 24V, 1.2 W When Power Supply (N 125/21) or an external 24V supply is used, current draw is 57 mA.	154-107	A5E02444614	001002
Gateways													
	Siemens IP Gateway KNX/BACnet (N 143) Gateway for integration of KNX systems into BACnet control systems. May be used to connect a computer running ETS to KNX for downloading. 250 KNX communication objects.	5WG1 143-1AB01	4 MW (2.83" [72 mm])	10 mA (If powered from N 125/21, total power draw is 55 mA.)	✓				✓ (see *Notes*)	Use one of the following: • 29 Vdc from Power Supply (N 125/21) • SELV or NEC Class 2 power supply, AC/DC 24V, 1 W When Power Supply (N 125/21) or an external 24V supply is used, current draw is 45 mA.	2.11.1.16	L1V30058373A	983601
	IntesisBox® BACnet/IP Server - KNX Gateway for integration of KNX systems into BACnet control systems. 500 KNX communication objects.	IBOX-BAC-KNX-A	~6 MW (4.21" [107 mm])	See footnote *g*	✓				✓ (see *Notes*)	Power supply: 9-30 Vdc, 1.4W 24 Vac, 125 mA	Included with LinkBox software	Included with LinkBox software	–
	IntesisBox® BACnet/IP Server - KNX Gateway for integration of KNX systems into BACnet control systems. 3,000 KNX communication objects.	IBOX-BAC-KNX-B	~6 MW (4.21" [107 mm])	See footnote *g*	✓				✓ (see *Notes*)	Power supply: 9-30 Vdc, 1.4W 24 Vac, 125 mA	Included with LinkBox software	Included with LinkBox software	–
	IntesisBox® Modbus Server (Slave) TCP/RTU - KNX Gateway for integration of KNX systems into Modbus control systems. 500 KNX communication objects.	IBOX-MBS-KNX-A	~6 MW (4.21" [107 mm])	See footnote *g*	✓				✓ (see *Notes*)	Power supply: 9-30 Vdc, 1.4W 24 Vac, 125 mA	Included with LinkBox software	Included with LinkBox software	–
	IntesisBox® Modbus Server (Slave) TCP/RTU - KNX Gateway for integration of KNX systems into Modbus control systems. 3,000 KNX communication objects.	IBOX-MBS-KNX-B	~6 MW (4.21" [107 mm])	See footnote *g*	✓				✓ (see *Notes*)	Power supply: 9-30 Vdc, 1.4W 24 Vac, 125 mA	Included with LinkBox software	Included with LinkBox software	–
Cabinets													
	Gamma Lighting Control Enclosures Support Gamma Lighting system components and other panel-mounted devices that snap into DIN rails. NEMA Type 1 lighting control panel with removable dead front, EN60715-TH35-7.5-1mm DIN rails, removable/reversible door with key lock. Each DIN rail accomodates 20 module widths (MW)[b].									The top DIN rail in each enclosure is commonly reserved for low-voltage modules. If no low voltage modules exist in the enclosure, the top DIN rail may be used for line voltage modules.	A6V10443516	A6V10425806	–
	20" × 20", two DIN rails, fits 40 MW total.	LCC-2020-MV	20" W × 4" D × 20" H (51 × 10 × 51 cm)										
	20" × 28", three DIN rails, fits 60 MW total.	LCC-2028-MV	20" W × 4" D × 28" H (51 × 10 × 71 cm)										
	20" × 44", five DIN rails, fits 100 MW total.	LCC-2044-MV	20" W × 4" D × 44" H (51 × 10 × 112 cm)										

NOTES:
a) When entering a Product Number in SAP, do not use spaces or dashes. For example, Product Number **5WG1 141-1AB02** is entered as **5WG11411AB02**.
b) 1 MW (Gamma N-system module width) = 0.71" (18 mm). Some Gamma documents may refer to SU (N-system standard unit) rather than MW.
c) If the backbone is IP, use the IP Router (N 146/02).
d) Used by the primary line.
e) Used by the secondary line.
f) For both the primary and secondary lines.
g) Where KNX bus load is not indicated, assume 10 mA per device.