Section 5

Lighting Control And Integrated Home Systems

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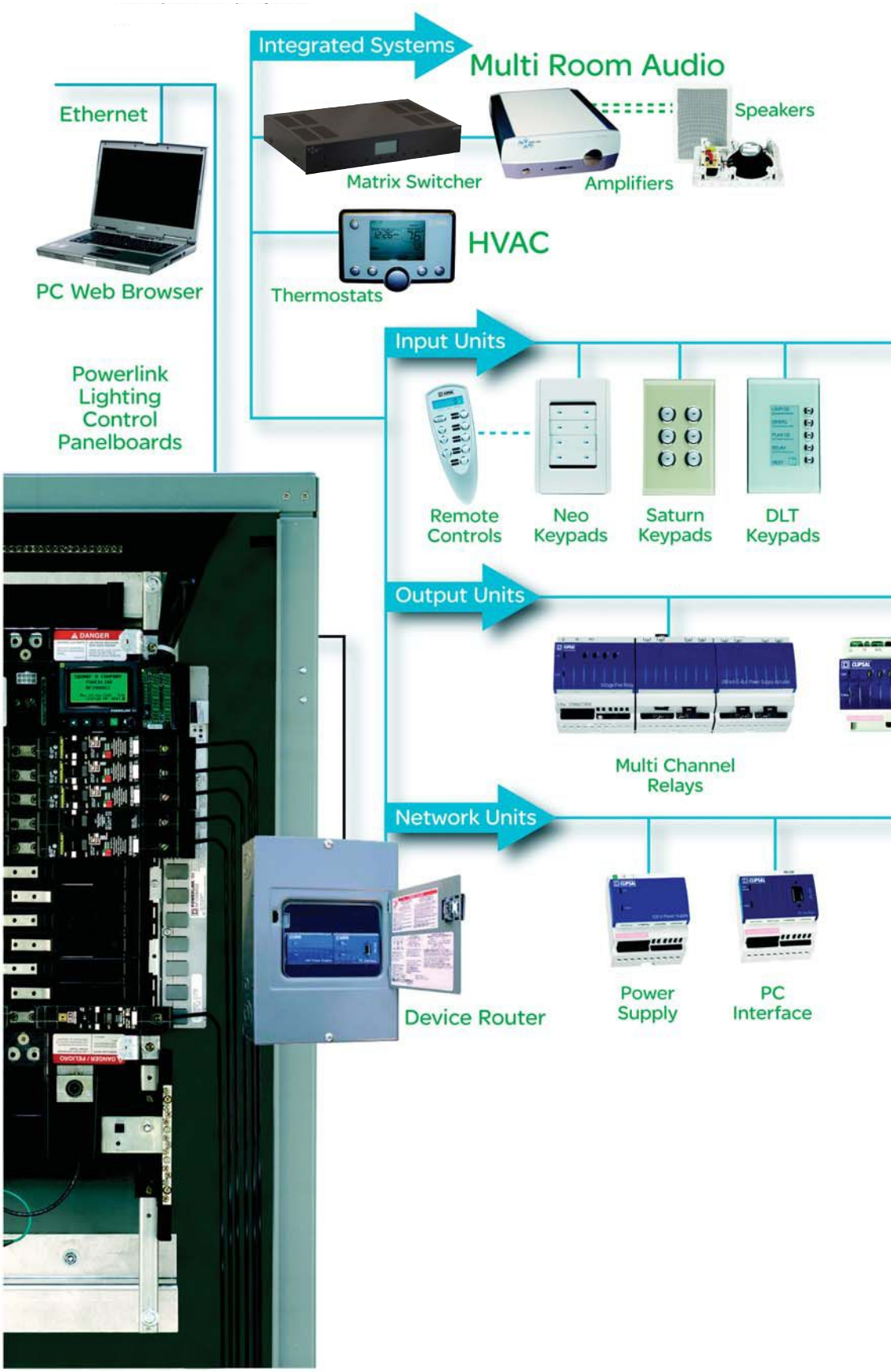
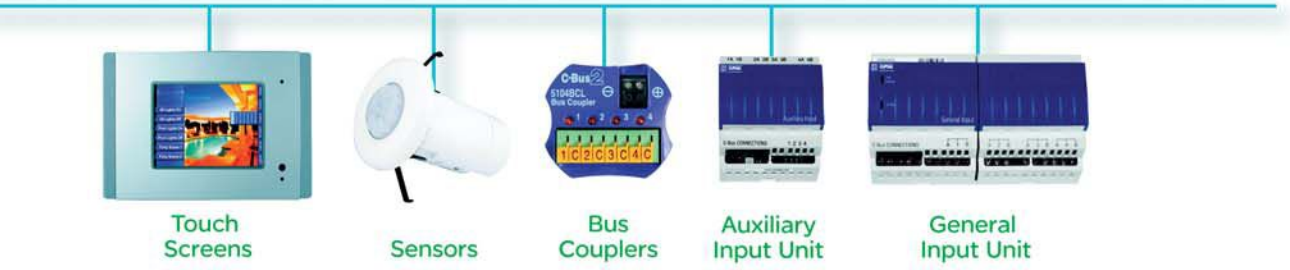
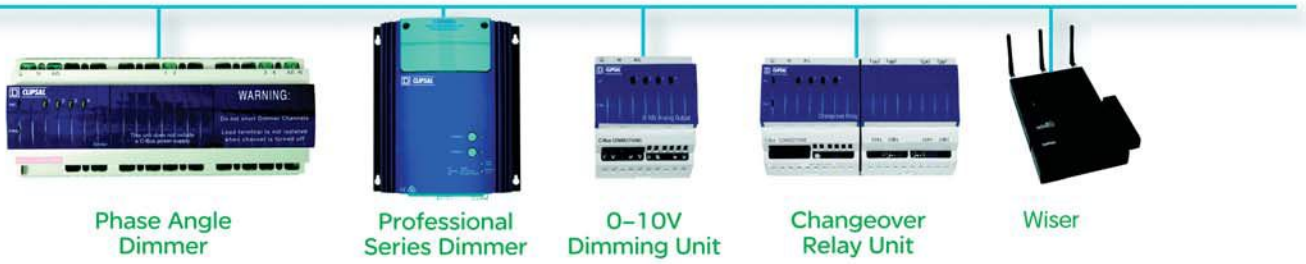
Schneider Electric Occupancy Sensors, Powerlink and C-Bus™ control systems can be used independently or combined to provide the optimal lighting control solution for your home or business







Neo™ Keypads

Neo Keypads offer localized finger-tip control of lighting and other electrical devices. With over 1,000 custom color combinations available, these elegant keypads compliment any decor. Requires plaster mud ring or single gang box with minimum internal width of 2.05".

- Button configurations include multi-point switching and dimming, master ON/OFF switching, and scene settings
- Scene control includes up to forty group addresses per keypad. Larger scenes are possible by sharing memory among multiple keypads
- Independent timers available for each button
- Standard built-in infrared receiver permits keypad control at a distance with an optional infrared handheld remote
- Dual-color LED windows on each button can glow in cool blue, orange, or combinations of both, indicating when a controlled device is ON or OFF
- Auto "fallback" can dim button LEDs at a set time after the last key press
- Locator LEDs can illuminate the top and bottom of the button area in cool blue, helping a user find the keypad in dim light or help the installer find the correct keypad when commissioning
- Clean-lined low-profile keypads are wall mounted without external fittings
- Optional button covers have ID windows, enabling quick identification of lighting scenes or controlled devices
- Distinctively designed multi-layer cover plate consists of button covers, an outer surround, and an inner surround
- Color schemes are easily customized and modified to suit personal taste or the décor

Standard Neo Keypads

Includes keypad, button covers, inner and outer surrounds.

White: SLC505( )NLWE
Cream: SLC505( )NLCM
Brushed Aluminum w/Slate: SLC505( )NLGB

( ) designates space for button configuration

Table 5.1: Standard Neo Keypad Assemblies

Catalog No.	Catalog Description	$ Price
SLC5052NLGB	Neo, 2 button key input brushed aluminum	**460.00**
SLC5052NLWE	Neo, 2 button key input solid white	**460.00**
SLC5052NLCM	Neo, 2 button key input solid cream	**460.00**
SLC5054NLGB	Neo, 4 button key input brushed aluminum	**500.00**
SLC5054NLWE	Neo, 4 button key input solid white	**500.00**
SLC5054NLCM	Neo, 4 button key input solid cream	**500.00**
SLC5058NLGB	Neo, 8 button key input brushed aluminum	**560.00**
SLC5058NLWE	Neo, 8 button key input solid white	**560.00**
SLC5058NLCM	Neo, 8 button key input solid cream	**560.00**

2 Button Keypad
Brushed Aluminum w/Slate: SLC505(2)NLGB

4 Button Keypad
Cream: SLC505(4)NLCM

8 Button Keypad
White: SLC505(8)NLWE

Custom Neo Keypad Assemblies

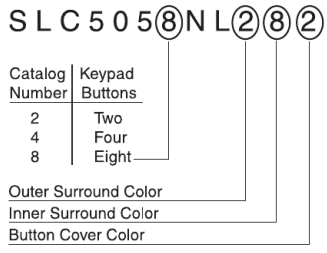
To order custom Neo Keypad assemblies indicate the number of buttons desired on the keypad and the color of each customizable component (inner surround, outer surround, and botton cover).

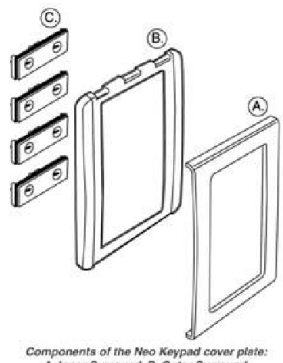
For example, in the diagram below, SLC505(8)NL(2)(8)(2) represents a Neo Keypad with eight buttons, a white (#2) outer surround, a brushed aluminum (#8) inner surround, and white (#2) button covers.

Table 5.2: Color Chart

Name	Color Number
Slate	1
White	2
Cream	3
Soft Gray	4
Desert Sand	5
Black	6
Brown	7
Brushed Aluminum▲	8
Gold▲	9

▲ Only the inner surround is available in Brushed Aluminum and Gold.





Components of the Neo Keypad cover plate: A. Inner Surround, B. Outer Surround, C. Button Covers

Table 5.3: Neo Keypad Accessories

Catalog No.	Catalog Description	$ Price
SLC5050IS( )	Neo, inner surround, (5pk)	**152.00**
SLC5050OS( )	Neo, outer surround, (5pk)	**46.00**
SLC5052NRP( )	Neo, button covers, 5052L, (5pk)	**60.00**
SLC5054NRP( )	Neo, button covers, 5054L, (5pk)	**60.00**
SLC5058NRP( )	Neo, button covers, 5058L, (5pk)	**60.00**
SLC5052NRI( )	Neo, button covers, with ID window, (10pk)	**82.00**

Note: Accessories have unique catalog numbers. To specify colors for them, (see Table 5.1) add the color number to the end of the catalog number (Table 5.3). For example, SLC5052NR2 is the catalog number for a white button cover.

Neo button cover with ID window


Saturn 2 Button Keypad


Saturn 4 Button Keypad


Saturn 6 Button Keypad

Saturn Style Keypad

Neo Style Keypad

Saturn™ Keypads

Saturn Keypads incorporate a unique glass cover plate that creates a distinctive appearance. By virtue of the variety of button configurations available, one compact Saturn keypad can take the place of many single operation switches, ON/OFF toggles, dimmers, and timers. Available in two-, four-, or six-button keypads, Saturn's modern style is complemented by orange and blue LEDs that can instantly show the status of controlled devices. Requires plaster mud ring or single gang box with minimum internal width of 2.05".

- Button configurations include multi-point switching and dimming, master ON/OFF switching, and scene settings
- Scene control includes up to forty group addresses per keypad. Larger scenes are possible by sharing memory among multiple keypads
- Independent timers available for each button
- Dual-color LED windows on each button can glow in cool blue, orange, or combinations of both, indicating when a controlled device is ON or OFF
- Auto "fallback" can dim button LEDs at a set time after the last button press
- Locator LED can illuminate the keypad, helping a user find it in dim light
- Clean-lined keypads are wall mounted without external fittings
- Low-profile design extends only 0.5 in. out from the wall
- Optional button covers with labels, enabling quick identification of lighting scenes or controlled devices

Saturn Keypads

Table 5.4: Complete Saturn Keypads

Catalog No.	Catalog Description	$ Price
SLC5082NL( )	Saturn Full Plate, 2 button	**634.00**
SLC5084NL( )	Saturn Full Plate, 4 button	**668.00**
SLC5086NL( )	Saturn Full Plate, 6 button	**700.00**

Note: Color codes are: White (WE), Black (BK), Mocha (BR), Cream (CM). The catalog number for a two-button keypad in mocha would be SLC5082NLBR

Table 5.5: Saturn Keypad Accessories

Catalog No.	Catalog Description	$ Price
SLC5080LC8	Saturn Button Labels	**74.00**
SLC5082NLFSS	Saturn Cover Plate Stainless Steel, 2 button	**96.00**
SLC5084NLFSS	Saturn Cover Plate Stainless Steel, 4 button	**112.00**
SLC5086NLFSS	Saturn Cover Plate Stainless Steel, 6 button	**128.00**
SLC5082FGF	Saturn Cover Plate White, 2 button	**96.00**
SLC5084FGF	Saturn Cover Plate White, 4 button	**112.00**
SLC5086FGF	Saturn Cover Plate White, 6 button	**128.00**
SLC5082F30	Saturn Cover Plate Cream, 2 button	**96.00**
SLC5084F30	Saturn Cover Plate Cream, 4 button	**112.00**
SLC5086F30	Saturn Cover Plate Cream, 6 button	**128.00**
SLC5082F60	Saturn Cover Plate Black, 2 button	**96.00**
SLC5084F60	Saturn Cover Plate Black, 4 button	**112.00**
SLC5086F60	Saturn Cover Plate Black, 6 button	**128.00**
SLC5082F70	Saturn Cover Plate Brown, 2 button	**96.00**
SLC5084F70	Saturn Cover Plate Brown, 4 button	**112.00**
SLC5086F70	Saturn Cover Plate Brown, 6 button	**128.00**

Note: Color options for faceplates: Pure White (PW).

DLT Keypads

Saturn™ Dynamic Labeling Technology™ (DLT) Keypads combine a programmable keypad button, and easily customized labels on a backlit LCD screen that eliminates the need for custom labels. By virtue of the variety of button configurations available, one compact DLT keypad can take the place of many single-operation switches, ON/OFF toggles, dimmers, and timers. The five keypad buttons incorporate blue LEDs which complements the keypad's sleek lines while showing the status of controlled devices.

- Button configurations include multi-point switching and dimming, master ON/OFF switching, and scene settings
- Keypads have five physical buttons—four control buttons, and one scroll/page button—combined with two screens of labels, for a total of eight control buttons and two scroll/page buttons
- Scene control includes up to forty addresses per keypad. Larger scenes are possible by sharing memory among multiple keypads.
- Independent timers available for each button
- Button LEDs can be used as locator lights in the dark
- 64 x 128 pixel LCD screen with a white backlight
- Editable LCD labels, available for each button or control group, can display text, symbols, and graphics.
- Dynamic graphic displays, such as bar graphs, can be enabled or disabled
- Bitmaps can be downloaded for each group address or scene
- Low-profile design, wall mounted without external fittings

Table 5.6: Saturn and Neo Style DLT Keypads

Catalog No.	Catalog Description	$ Price
SLC5085DLWE	Saturn DLT White	966.00
SLC5085DLBK	Saturn DLT Black	966.00
SLC5085DLCM	Saturn DLT Cream	966.00
SLC5085DLBR	Saturn DLT Mocha	966.00
SLC5055DLGB	Neo DLT Brushed Aluminum	898.00
SLC5055DLWE	Neo DLT White	898.00
SLC5055DLBK	Neo DLT Black	898.00
SLC5055DLSG	Neo DLT Soft Grey	898.00
SLC5055DLCM	Neo DLT Cream	898.00
SLC5055DLDS	Neo DLT Desert Sand	898.00

Table 5.7: DLT Keypad Accessories

Catalog No.	Catalog Description	$ Price
SLC5085DLFSS	Saturn DLT cover plate, Stainless Steel	110.00
SLC5085DLFCM	Saturn DLT cover plate, Cream	110.00
SLC5085DLFBK	Saturn DLT cover plate, Black	110.00
SLC5085DLFBR	Saturn DLT cover plate, Mocha	110.00
SLC5085DLFWE	Saturn DLT cover plate, White	110.00
SLC5055DLFGB	Neo DLT cover plate, Brushed Aluminum and Slate	12.00
SLC5055DLFBR	Neo DLT cover plate, Brown	12.00
SLC5055DLFCM	Neo DLT cover plate, Cream	12.00
SLC5055DLFBK	Neo DLT cover plate, Black	12.00
SLC5055DLFSG	Neo DLT cover plate, Soft Gray	12.00
SLC5055DLFDS	Neo DLT cover plate, Desert Sand	12.00
SLC5055DLFWE	Neo DLT cover plate, White	12.00

Note: Color options for faceplates: Pure White (PW).

Neo™ Decorator Keypads

Neo Decorator Keypad

Neo Style Decorator Keypads provide the same features of a standard C-Bus keypad in a format designed to conserve horizontal wall space.

- Button configurations include multi-point switching, dimming, and scene control
- LED indicator reflects status of each button
- Built-in infrared receiver to allow operation from C-Bus handheld remote control
- Distinctive Neo styling designed to match standard Neo keypads and touchscreens
- Custom color combinations available on request
- Meets NEMA Standards WD-1, WD-6

Table 5.8: Neo Decorator Keypad Assembly (order face plates separately)

Catalog No.	Description	$ Price
Neo Decorator 1 button keypad (XX) Designates Color. (order cover plate separately)		
SLC5051NLM(XX)	1 button decorator keypad	386.00
Neo Decorator 2 button keypad (order cover plate separately)		
SLC5052NLM(XX)	2 button decorator keypad brushed aluminum	408.00
Neo Decorator 3 button keypad (order cover plate separately)		
SLC5053NLM(XX)	3 button decorator keypad brushed aluminum	430.00
Neo Decorator 4 button keypad (order cover plate separately)		
SLC5054NLM(XX)	4 button decorator keypad brushed aluminum	452.00
Neo Decorator Blanking Plate (order cover plate separately)		
SLC5850BP(XX)	Neo blanking plate	14.00

Note: Designate colors (XX), when placing order for Neo style decorator keypads.
GB – Brushed, WE – White, CM – Cream, SG – Soft Grey, DS – Desert Sand, BK – Black, BR – Brown, LA – Light Almond, VY – Ivory.

Saturn™ Decorator Keypads

Saturn Decorator Keypad

Saturn Style Decorator Keypads provide the same features of a standard C-Bus keypad in a format designed to conserve horizontal wall space.

- Button configurations include multi-point switching, dimming, and scene control
- LED indicator reflect status of each button
- Built-in infrared receiver to allow operation from C-Bus remote controllers
- Distinctive Saturn styling designed to match standard Saturn keypads and touchscreens
- Meets NEMA Standards WD-1, WD-6

Table 5.9: Saturn Decorator Keypad Assembly (order face plates separately)

Catalog No.	Description	$ Price
Saturn Decorator 1 button keypad (XX) Designates Color. (order cover plate separately)		
SLC5081NLM(XX)	1 button deco Saturn keypad, White	526.00
Saturn Decorator 2 button keypad (XX) Designates Color. (order cover plate separately)		
SLC5082NLM(XX)	2 button deco Saturn keypad, White	538.00
Saturn Decorator 3 button keypad (XX) Designates Color. (order cover plate separately)		
SLC5083NLM(XX)	3 button deco Saturn keypad, White	548.00
Saturn Decorator 4 button keypad (XX) Designates Color. (order cover plate separately)		
SLC5084NLM(XX)	4 button deco Saturn keypad, White	556.00
Blanking Plates		
SLC5880BPPG(XX)	Saturn Blanking Plate	24.00

Note: Designate colors (XX), when placing order for Saturn style decorator keypads.
WE – White, PW – Pure White, CM – Cream, BK – Black, BR – Brown.

Neo Decorator Style Cover Plate

Neo and Saturn Style Decorator Face Plates

C-Bus decorator style wall plates add a touch of flair to any décor. Available in either Neo or Saturn styling.

- Sleek, smooth contemporary architectural styling enhances fine decor
- Screwless design for easy placement
- Two piece kit allows easy retrofit
- Meets NEMA Standards WD-1, WD-6

Table 5.10: Neo Decorator Style Cover Plates (order keypad assemblies separately)

Catalog No.	Description	$ Price
Neo Decorator Cover Plate 1 gang▲		
SLC5051GA(XX)	1 gang wallplate	**14.00**
Neo Decorator Cover Plate 2 gang▲		
SLC5052GA(XX)	2 gang wallplate	**18.00**
Neo Decorator Cover Plate 3 gang▲		
SLC5053GA(XX)	3 gang wallplate	**22.00**
Neo Decorator Cover Plate 4 gang▲		
SLC5054GA(XX)	4 gang wallplate	**26.00**

▲ Cover plate assembly includes inner and outer surrounds. Wall plate ordering (Order keypads separately). Order numbers for the Neo decorator style wall plates indicate the gang number desired on the wall plate and the color of the wall plate itself. Color codes are: Slate (1), White (2), Cream (3), Soft gray (4), Desert sand (5), Black (6), Brown (7), Brushed aluminum (8), and Gold (9). For example, SLC505(1)GA(51) represents an order fo a Neo decorator style wall plate in one gang configuration, with a Desert sand outer surround and a slate inner surround.

2 Gang Saturn Decorator Style Cover Plate

Table 5.11: Saturn Decorator Style Cover Plates (order keypad assemblies separately)

Catalog No.	Description	$ Price
Saturn Decorator Cover Plate 1 gang■		
SLC5081GAPG(XX)	1 gang wallplate	**24.00**
Saturn Decorator Cover Plate 2 gang■		
SLC5082GAPG(XX)	2 gang wallplate	**28.00**
Saturn Decorator Cover Plate 3 gang■		
SLC5083GAPG(XX)	3 gang wallplate	**38.00**
Saturn Decorator Cover Plate 4 gang■		
SLC5084GAPG(XX)	4 gang wallplate	**45.00**

■ To specify color, add corresponding alpha codes. Black = BK, White = WE, Cream = CM, Mocha = BR. Example SLC5081GAPG(WE) = Saturn Decorator 1 gang, White

Mark II Black and White and Spectrum Color touch screen with Cream Saturn style cover plate

Touch screens

C-Bus Touch screens are unified wall-mounted panels for controlling lighting systems and accessories with the touch of a finger. They come in both monochromatic (Mark II) and color screen versions. Compact yet powerful, touch screens offer an attractive alternative to multiple single operation switches, ON/OFF toggles, dimmers, and timers which can clutter up even the nicest wall.

Mark II Black and White and Spectrum Color touch screen

- Control screens support multi-point switching and dimming, master ON/OFF switching, scheduling, and scenes with multiple loads.
- Preset scenes and functions automate the task of adjusting lighting levels to different lamps and fixtures.
- RS-232 port for third party device integration through the built in Logic Engine
- Standard real-time and astronomical clock permits time scheduling of lighting and other tasks
- Variable dimming fade rates can be configured according to load or lighting zone
- Locator option can be configured to help users find the screen in dim light
- Clean-lined low-profile touch screen can be wall-mounted without external fittings
- Infrared receiver for remote control
- Stores up to 250 scenes with 100 group addresses each. Scenes can be triggered directly from the touch screen or any other device on C-Bus

Mark II Black and White and Spectrum Color touch screen desktop model

Mark II Black and White and Spectrum Color touch screen (desktop model)

- Screen swivels and pivots for optimal viewing
- Control screens support multi-point switching and dimming, master ON/OFF switching, scheduling, and scenes wtih multiple loads.
- Preset screens and functions automate the task of adjusting lighting levels to different lamps and fixtures.
- Standard real-time and astronomical clock permits time scheduling of lighting and other tasks
- Variable dimming fade rates can be configured according to load or lighting zone
- Locator option can be configured to help users find the screen in dim light
- Infrared receiver for remote control

Table 5.12:

Catalog No.	Catalog Description	$ Price
Mark II B/W Touch Screen		
SLC5050CTL2xx	Mark II w/Neo Style Cover Plate	2439.00
SLC5080CTL2xx	Mark II w/Saturn Style Cover Plate	2499.00
SLC5000CTL2SS	Mark II w/Stainless Steel Cover Plate	2499.00
Mark II Touch Screen Desktop Model		
SLC5000CTD2xx	Mark II Desktop Touch Screen	1920.00
xx = color code / WE–White, BK–Black		
Spectrum Touch Screen		
SLC5000CTCL2	Spectrum Base Unit Only	2106.47
SLC5000CTCL2xx	Spectrum w/non-stylized plastic Cover Plate	2374.45
SLC5050CTCL2xx	Spectrum w/Neo Style Cover Plate	2341.17
SLC5080CTCL2xx	Spectrum w/Saturn Style Cover Plate	2386.69
SLCBS5000CTCL2	Spectrum w/Stainless Steel Cover Plate	2232.47
SLCBB5000CTCL2	Spectrum w/Brass Cover Plate	2265.22
xx = color code / GB – Brushed Aluminum and Slate▲, WE – White, BK – Black, CM – Cream, BR – Mocha■, PW – Pure White■.		
Spectrum Desktop Model		
SLC5000CTCD2xx	Spectrum Desktop Touch Screen	2365.61
xx = color code / WE–White, BK–Black		
Accessories		
Mark II / Spectrum Accessories		
SLC5000CT2WB	Wall box for Mark II / Spectrum Touch Screen	68.00
SLC5080CT2Fxx	Replacement Cover Plate, Saturn style	280.22
SLC5000CT2FSS	Replacement Cover Plate, Stainless Steel	126.00
SLC5050CT2Fxx	Replacement Cover Plate, Neo style	187.76
xx = color code / GB – Brushed Aluminum and Slate▲, WE – White, BK – Black, CM – Cream, BR – Mocha■, PW – Pure White■.		

▲ Neo only.
■ Saturn only.

Color touchscreen in Neo style Brushed Aluminum and Slate

Color touch screen

- Built-in RJ-45 Ethernet and C-Bus network, RS-232, and USB terminals
- Touch sensitive 6.4 inch (640 x 480) color LCD panel
- Control screens support multi-point switching
- Standard real-time and astronomical clock permits time scheduling of lighting and other tasks
- Variable dimming fade rates can be configured according to load or lighting zone
- Locator option can be configured to help users find the screen in dim light
- Clean-lined low-profile touch screen can be wall-mounted without external fittings
- Infrared receiver for remote control

Table 5.13:

Catalog No.	Catalog Description	$ Price
Color Touch Screen		
SLC5050CTCxx	Color touch screen w/Neo style Cover Plate	8480.00
SLC5080CTC2xx	Color Touch Screen w/Saturn style Cover Plate	8480.00
Color Touch Screen Accessories		
SLC5000CTCRM	Plasterboard Bracket for Color Touch Screen	90.00
SLC5000CTCNA	Nail Bracket for Color Touch Screen	60.00
SLC5000CTCWB	Wall box for Color Touch Screen	68.00
SLC5000CTCPS	Power supply for Color Touch Screen	263.00
SLC5080CTCFxx	Replacement Cover Plate, Saturn style	356.00
SLC5050CTCFxx	Replacement Cover Plate, Neo style	29.00
xx = color code / GB – Brushed Aluminum and Slate▲, WE – White, BK – Black, CM – Cream, BR – Mocha■.		

▲ Neo only.
■ Saturn only.

Wiser Home Controller

Wiser™ Home Controller

The Wiser Home Controller is the missing piece of the smart home puzzle, enhancing the capabilities and connectivity of the C-Bus network. Its easy-to-use graphical user interface (GUI) provides access to the home C-Bus network and all of your electrical, multimedia, and telecommunication needs. This same GUI can be installed across multiple control devices, such as mobile phones, TVs with Microsoft® Windows® Media® Center, personal computers, and web tablets, in addition to the C-Bus range of touch screens and keypads. No matter where you are, the Wiser Home Controller allows you to monitor and control your home environment locally or remotely over the internet.

Features

- Ethernet and Wi-Fi based controller for your C-Bus system
- Built-in Ethernet router and Wi-Fi access point
- Support for lighting, air-conditioning, multi-room audio, alarms, cameras, and other equipment
- Built-in scene, scheduling, and logic programming modules
- Allows remote reprogramming from outside the home/building by installers
- Common, intuitive interface for all devices
- Mobile phone and web-enabled device control

Table 5.14: Order Information

Description	Catalog Number	$ Price
Wiser Home Controller	WHC-5918	1505.00

C-Bus Multi Room Audio

Extend the capabilities of a C-Bus system by incorporating award winning multi-room audio into your next project. Multi-room audio augments a C-Bus lighting control system, providing high quality sound throughout a home or business.

C-Bus multi-room audio readily integrates with other C-Bus controls, providing a single source for audio and lighting from a single keypad or touch screen. Sound is distributed throughout the home through the Matrix Switcher and routed to local amplifiers.

A typical C-Bus Multi Room Audio system distributes up to four analog audio inputs, five if an Audio Distribution Unit is used, and one optical input. These inputs are distributed up to 8 zones, each consisting of one or more amplifier. Additionally, each amplifier is capable of accepting a local analog audio input, providing up to six stereo audio channels for each amplifier.


Matrix Switcher


Low Power Amplifier

Matrix Switcher

The C-Bus™ Audio Matrix Switcher provides a revolutionary means for distributing audio throughout a home. This Matrix Switcher provides up to eight zones of audio output from four source inputs. The C-Bus Matrix Switcher allows you to send streaming audio programs to the audio zones from a variety of sources, including a local area network (LAN), or a USB memory stick (Model: SLC5608842E). In addition, it will also allow connection of a portable music player directly to the Matrix Switcher's front audio panel. Audio sources can be selected from the front panel or by any C-Bus™ input device such as touch screens or keypads. The Matrix Switcher is ideally suited for multi-room audio and structured wiring systems. Keypads and other C-Bus™ devices connect to the Matrix Switcher via CAT-5 modular jacks. Outputs to remote and desktop amplifiers are made with low voltage wiring. In addition to the six source inputs, two mono broadcast annunciation inputs are provided for connection to intercoms or other systems. Broadcast annunciation input can be given priority over other source inputs and features fully adjustment volume and over-stepping mute features.

- Suitable for 19" Rack Mount with rack mount ears provided.
- Each Matrix Switcher can distribute digital audio to up to 8 MRA amplifiers. You can install up to 3 Matrix Switchers on a C-Bus network.
- The Matrix Switcher can provide power for the attached amplifiers via the Digital Audio cables. You can connect an external power supply to an amplifier to increase its audio power output.
- The choice of the audio program for an amplifier can be made at the Matrix Switcher or in the audio zone. You can use C-Bus input devices to choose the source and to adjust volume, tone and muting.
- The Dual AM/FM tuners inside the Matrix Switcher can distribute preset station choices to any of the audio zones.
- Distributes streaming audio from several sources using the C-Bus Ripple software application running on a networked PC.
- You can connect up to 4 stereo analogue line-level inputs to the Matrix Switcher. If you need to add another source input, you can install an MRA Distribution Unit and power supply.
- Compatible with C-Bus devices.

Desktop Amplifier

Remote Amplifiers

C-Bus Multi Room Amplifiers provide efficient, high fidelity audio to individual rooms. Available in either desktop or remote mount versions, these amplifiers are specifically designed to operate on the C-Bus network as an extension of a lighting control system, without third party gateways or custom integration. This means the ability to control amplifiers with the same keypad or touch screen used to control lighting levels.

When combined with the C-Bus Matrix Switcher, these amplifiers deliver excellent stereo sound. Connections are provided for up to two sets of 8 ohm speakers. Both desktop and remote amplifiers provide a local input connection for attaching to CD or mp3 players, etc. In addition, the desktop amplifier will accept remote commands via its infrared receiver. Infrared remote included.

- 10 Watt digital efficient stereo amplifier, 25 Watts when connected to local power supply (optional)
- Super quiet design
- On board 8 ohm loudspeaker connections
- Local source input — RCA jack
- C-Bus connection (connects with CAT-5 cable)
- Volume control (desktop model)
- On-board IR receiver (desktop model)
- Stereo headphone connection (desktop model)
- Infrared remote included (desktop model only)

Audio Distribution Unit

Audio Distribution Unit

The C-Bus Audio Distribution Unit is an optional device that can be used in conjunction with the C-Bus Multi Room Audio System to further enhance C-Bus enabled audio product family.

The C-Bus Audio Distribution Unit distributes a single digitized stereo audio input source to multiple locations via amplifiers wired in a parallel format. Functions such as Volume, Bass, Treble and Balance can be adjusted from a C-Bus input device at any of the audio output locations. The C-Bus Audio Distribution Unit converts a single analog stereo audio input to a digital audio output. That output can then be connected to the Matrix Switcher as an additional input or to the C-Bus Desktop or Remote Amplifier as a stand-alone configuration.

- Distributes a single stereo audio source to C-Bus Audio Amplifiers via a digitized signal over Cat-5 cable
- Does not require any C-Bus programming (hardware only)
- One stereo analog audio source input (2 X RCA)
- One digital audio output
- Output can be looped between C-Bus Audio Amplifiers
- IR emitter port

Table 5.15: C-Bus Multi Room Audio Components

Catalog No.	Catalog Description	$ Price
SLC560110R	Low Power Amplifier, rack mountable	TBD
SLC5608842	Matrix Switcher w/4 stereo analog inputs, 2 internal AM/FM tuners, IR input and target connections. Up to 8 MRA Zones.	4599.00
SLC5608842E	Matrix Switcher w/4 stereo analog inputs, 2 internal AM/FM tuners, IR input and target connections. Audio streaming using a LAN or USB source. Up to 8 MRA Zones.	4274.10
SLC560125D	Desktop Amplifier	1908.15
SLC560125R	Remote Amplifier	1609.79
SLC560011	Audio Distribution Unit	790.41
SLC5600P24500S	Amp External Power Supply (only needed if Audio distribution unit is used to provide an additional digital input for the Matrix Switcher)	53.22
Accessories		
SLC5600P241250	Low Power Amplifier Power Supply	TBD
SLC560110E	Low Power Amplifier Enclosure (used for linking up to 4 amplifiers/enclosures together for mounting in a 19" rack)	TBD
SLC560110MB	Low Power Amplifier Wall Mounting Bracket	TBD
SLC5600P243750T	Audio Amplifier Power Supply	445.93
SLC560125MB	Remote Amplifier Mounting Bracket	42.24

Indoor Ceiling Mount Speakers

Indoor Wall Mount Speakers

Audio Speakers

C-Bus Audio Speakers are available as indoor or outdoor models and are designed to be used with home theater, multi-room, and outdoor audio applications.

The indoor speakers come in wall or ceiling mount versions that are installed with the front of the speaker flush with the mounting surface.

The indoor/outdoor speakers are available in black or white and can be placed on a shelf or hung on a surface by using the included bracket.

- Flush-mount, shelf-mount, and surface-mount models
- Indoor and outdoor models
- High-impact plastic components and powder coated metal grills produce a long-lasting unit suitable for indoor and outdoor use
- 8 ohm impedance
- Available with Kevlar™ (indoor units only) or polypropylene drivers (indoor and outdoor units) for high-quality sound in all applications
- All models are off the floor, saving floor space
- Indoor/Outdoor Speakers have a pre-installed, removable mounting bracket
- Indoor/Outdoor Speakers can be placed on a shelf or hung from a surface by their bracket (included)
- Tracing/painting template included

Indoor/Outdoor Speakers

Table 5.16: Multi-Room Audio Speakers

Catalog No.	Catalog Description	$ Price
SLC5600IWP	In-Wall Polypropylene speakers	429.58
SLC5600IWK	In-Wall Kevlar speakers	560.00
SLC5600ICP	In-Ceiling Polypropylene speakers	408.53
SLC5600ICK	In-Ceiling Kevlar speakers	521.09
SLC5600ODPBK	Outdoor Black speakers	468.30
SLC5600ODPWE	Outdoor White speakers	468.30

8 button
remote control

Universal
remote control

Hand Held Remote Controls

C-Bus remote controls are designed for use with C-Bus keypads, multi-sensors, and touch screens. available in both four and eight button versions, these remotes have a range up to 50 feet (line of sight).

The universal remote control unit allows a single remote control unit to replace various other remotes including VCRs, CD players, DVRs, and TVs. Up to sixteen remote control codes are supported.

Table 5.17: Handheld Remote Controls

Catalog No.	Catalog Description	$ Price
SLC5084TX	Handheld infrared remote 4 button	**200.00**
SLC5088TX	Handheld infrared remote 8 button	**400.00**
SLC5030URC	Handheld universal remote control	**440.00**

4 Zone Thermostat

Single and 4 Zone Network Thermostats

C-Bus Thermostats are used to regulate the air temperature of zones by controlling heating-ventilation-air conditioning (HVAC) equipment. The air temperature is monitored by the unit's temperature sensor or optionally via an external C-Bus temperature sensor.

C-Bus single and programmable 4 Zone Thermostats may operate as stand alone devices, or be controlled via other C-Bus devices such as wall switches or touch screens.

Programmable 4 Zone Thermostats can schedule up to four set points during a day, and unique schedules can be programmed for each day of the week.

Both models include setback mode, (saves power by using a wider acceptable temperature range within which heating or cooling is not performed) and temperature guard, (ensures the temperature is maintained within a specified temperature range).

- Easy to read, large LCD display
- Control by keypads and other devices on the C-Bus network
- Available in black, white and stainless steel fascias
- Setback mode
- Temperature guard mode
- Internal Timer
- Daily schedule set points (4 Zone model)
- Display temperature in Celsius or Fahrenheit
- RWG interface (relay models only)
- Easily configured by using the Clipsal Toolkit software program

Single Zone Thermostat

Table 5.18: Single and 4 Zone Network Thermostats

Catalog No.	Catalog Description	$ Price
SLC5070THBWE	Single Zone, White, no relay	**649.00**
SLC5070THPWE	4 Zone, White, no relay	**799.00**
SLC5070THBBK	Single Zone, Black, no relay	**649.00**
SLC5070THPBK	4 Zone, Black, no relay	**799.00**
SLC5070THBSS	Single Zone, Stainless, no relay	**649.00**
SLC5070THPSS	4 Zone, Stainless, no relay	**799.00**
SLC5070THBRWE	Single Zone w/relay, White	**724.00**
SLC5070THPRWE	4 Zone w/relay, White	**899.00**
SLC5070THBRBK	Single Zone w/relay, Black	**724.00**
SLC5070THPRBK	4 Zone w/relay, Black	**899.00**
SLC5070THBRSS	Single Zone w/relay, Stainless	**724.00**
SLC5070THPRSS	4 Zone w/relay, Stainless	**899.00**
SLC5031RDTSL	Remote Temperature Sensor	**298.00**

Light Level Sensor

360° Indoor PIR Sensor

Light Level Sensor

The C-Bus Light-Level Sensor measures ambient light levels and automatically issues ON, OFF, or ramp commands over a C-Bus network. The light-level sensor can control relays, dimmers, or remotely operated circuit breakers, changing their status according to pre-set ambient lighting targets. The C-Bus light-level sensor has a dynamic range between 5-150 foot candles, and compensates for noise and rapid light intensity fluctuations.

Outdoor Light Level Sensor

C-Bus Outdoor Light-Level Sensor measures ambient light levels and automatically issues ON/OFF or ramp commands over a C-Bus network to maintain outdoor lighting levels. Primarily designed for outdoor use, this light-level sensor is also suitable for indoor setting in which a water resistant casing is desirable.

The light-level sensor can control up to two C-Bus group addresses: one address controls ON/OFF switching of a lamp circuit according to a pre-determined ambient light level, while the other is used to continuously regulate the light-level output of any number of lampsl

The target light level, the margin, and other sensor options are easily configured by using the C-Bus Toolkit software.

- Outdoor use, wall- and ceiling-mounted low-profile unit
- Can maintain a constant illumination level of 5-150 footcandles
- Adjustable lumin setpoint
- Control of up two C-Bus group addresses
- Sensors receive data and power over a single C-Bus twisted-pair cable, so they do not require power packs or line-voltage connections
- 180° field of view

Table 5.19: C-Bus Light Level Sensor

Catalog No.	Catalog Description	$ Price
SLC5031PE	Light level sensor, 0–150 Foot-candles, Indoor	208.00
SLC5031PEWP	Light Level Sensor, 5–150 Foot-candles, Outdoor	278.00

Outdoor PIR Sensor

90° Indoor PIR Sensor

Occupancy Sensors

C-Bus occupancy sensors are available for both indoor and outdoor applications. All C-Bus sensors incorporate reliable passive infrared detection (PIR) circuits for occupancy detection along with integral light level sensors to prevent switching of lights if sufficient ambient light is present. Sensors feature programmable adjustments for sensitivity and time delay, walk test LED for commissioning and optical bandpass filtering with dual element detectors to minimize false triggering.

- 90° Indoor sensors are intended for wall or ceiling mounting. These sensors have a continuous detection field of 400 square feet and a 90° field of view.
- 360° Indoor sensors are intended for flush mounting in drop ceilings. They have a minor motion detection field of 800 square feet making them ideal for use in offices, copier rooms, closets, and restrooms where it can be mounted in the center of the detection area.
- 360° Multi-Sensors combine a passive infrared receiver (PIR) for occupancy sensing, a light-level sensor, and an infrared remote receiver into a small, highly versatile unit. The multi-sensor's 2.8 inch face diameter makes it unobtrusive and ideally suited for flush mounting on the ceiling with effective IR coverage up to 800 square feet. The built-in IR receiver accepts commands from an optional handheld remote controller, making the sensor ideal for classrooms and conference room areas.
- Outdoor PIR Motion Sensor combines reliable thermal-radiation-based control of lighting with rugged construction suitable for outdoor requirements. The unit's advanced circuits and flat multi-segmented lens provide coverage of up to 3000 square feet in a 110° field of view.

360° PIR Multi Sensor

Table 5.20: C-Bus Occupancy Sensors

Catalog No.	Catalog Description	$ Price
SLC5750WPL	Occupancy sensor, multi, outdoor, 110 deg	283.00
SLC5751L	Occupancy sensor, PIR, indoor, 90 deg	227.00
SLC5753L	Occupancy sensor, PIR, indoor, 360 deg	213.00
SLC5753PEIRL	Occupancy sensor, multi, indoor, 360 deg	268.00

Four-Channel Auxiliary Input unit

Auxiliary Input Unit

C-Bus Four-Channel Auxiliary Input Units increase the versatility of the C-Bus network by facilitating remote access with any dry-contact switch mechanism. DIN-rail mounted for quick installation, the auxiliary unit can be configured with standard C-Bus control functions such as remote scene triggering, ON/OFF, toggle, dimmer, or timer.

- Provides four isolated inputs for external voltage-free mechanical switches
- Control options include remote scene triggering, ON/OFF, toggle, dimmer, or timer operations
- LEDs indicate operational status of each channel
- Standard built-in C-Bus network connectors: (2) RJ-45
- Non-volatile memory stores operating status for recovery from a power outage
- DIN style construction 4M wide: 3.4"(L) x 2.8"(W) x 2.6"(H)
- Compatible with all Clipsal devices and the Square D Powerlink™ NF3000G3C controller

General Input unit

General Input Unit

Four-Channel General Input Units measure TTL digital and real-world analog quantities and generate messages about the measurements to the C-Bus network. By acting as an interface with various external sensors, the general input unit enables integration of the C-Bus network with a variety of system types, such as those for HVAC and for power monitoring. Configuration options include selectable input types, eight adjustable decision thresholds per channel, definable actions, selectable filtering, broadcast rates, and a separate hysteresis value per channel.

- Measures TTL digital quantities including voltage, current, or resistance from external sensors such as light level, pressure, and temperature
- Four channels of input, each with an adjustable hysteresis value, eight decision thresholds, and a software-selectable input value transformation in the form y =ax +b
- Input channels are compatible with a range of third-party sensors
- Control functions include load switching, dimming, trigger applications, enable control applications, and measurement applications
- Includes 120 V/24 Vdc power pack
- Dimensions: 5.67 in. (144mm) wide x 2.60 in. (66mm) deep x 3.35 in. (85mm) tall
- Compatible with all Clipsal devices and the Square D Powerlink NF3000G3C controller

Four-Channel Bus Coupler

Bus Couplers

Bus Couplers provide an interface between dry-contact mechanical switches and the C-Bus network. Available in two-and four-channel models, the bus coupler is small enough to be used in restricted spaces such as wall boxes with existing switches. Configuration options include standard control functions such as ON/OFF, toggle, dimmers, and timers.

- Provides two or four non-isolated inputs for external voltage-free mechanical switches. Two-channel units feature independent remote LED outputs
- Two-way removable terminal block for the C-Bus connection
- Receives data and power over a network, so it does not require power packs or line voltage connections
- Scene capabilities
- 2.2”(L) x 1.9”(W) x 0.7”(H)
- Compatible with all Clipsal devices and the Square D Powerlink NF3000G3C controller

Table 5.21: Input Units

Catalog No.	Catalog Description	$ Price
SLCLE5504AUX	4 Channel auxiliary input unit	**544.00**
SLCE5504TGI	4 Channel general input unit	**1194.00**
SLC5102BCLEDL	2 Channel bus coupler	**212.00**
SLC5104BCL	4 Channel bus coupler	**243.00**

Relays

C-Bus Relay Units are intended for switching resistive, inductive, fluorescent and incandescent low-voltage loads. Relay units are designed to be mounted in suitable DIN style enclosures. Relay units feature:

- Local toggle buttons to allow individual channels to be toggled
- Remote ON and OFF facilities permitting all channels to be turned ON or OFF without C-Bus Network communications
- Two (2) Convenient built-in C-Bus network connectors (RJ-45)
- LED Indicators to show the status of the network and the unit
- Units available both with and without a 200ma power supply on-board.
- Compatible with all Clipsal devices and the Square D Powerlink™ NF3000G3C controller

Changeover Relay

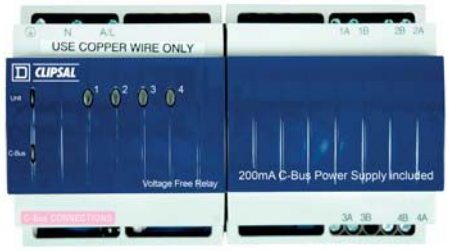
Changeover Relay

C-Bus 2A Changeover Relays are designed to operate three-speed motors and two-way motor control devices. Some of their most common applications include operating motorized blinds, shutters, curtains and skylights (open/closed) where they provide a much simpler alternative to traditional and obtrusive relay interlocking systems.

- Four (4) isolated independently operating relay channels
- 120 Vac and 277 Vac units
- 2A motor rating
- Dimensions: 5.67 in. (144mm) wide x 2.60 in. (66mm) deep x 3.35 in. (85mm) tall

Table 5.22: Changeover Relays

Catalog No.	Catalog Description	$ Price
SLC5504TRVFC	4 Channel Changeover Relay, 125 V, with power supply	**1100.00**
SLC5504TRVFCP	4 Channel Changeover Relay, 125 V, without power supply	**1010.00**
SLC5504HRVFC	4 Channel Changeover Relay, 277 V, with power supply	**1100.00**
SLC5504HRVFCP	4 Channel Changeover Relay, 277 V, without power supply	**1010.00**



4-Channel 10 A Relay

10 Amp Relay

C-Bus 10A Relays feature a zero crossing magnetically latching relay designed for switching the harsh electrical loads associated with today's high efficiency lighting systems.

- Four (4) or twelve (12) independently operating voltage free relay contacts
- 120 Vac and 277 Vac units
- 10 A rating
- Dimensions: 5.67 in. (144 mm) wide x 2.60 in. (66 mm) deep x 3.35 in. (85 mm) tall

Table 5.23: 10 Amp Relay

Catalog No.	Catalog Description	$ Price
SLC5512TRVF	12 Channel Relay, 120 V, 10 A with power supply	**2168.00**
SLC5512TRVFP	12 Channel Relay, 120 V, 10 A without power supply	**1973.00**
SLC5504TRVF	4 Channel Relay, 120 V,10 A with power supply	**1043.00**
SLC5504TRVFP	4 Channel Relay, 120 V, 10 A without power supply	**843.00**
SLC5512HRVF	12 Channel Relay, 277 V, 10 A with power supply	**2168.00**
SLC5512HRVFP	12 Channel Relay, 277 V, 10 A without power supply	**1973.00**
SLC5504HRVF	4 Channel Relay, 277 V,10 A with power supply	**1043.00**
SLC5504HRVFP	4 Channel Relay, 277 V, 10 A without power supply	**843.00**

4-Channel 20 A Relay

20 Amp Relay

C-Bus 20 A Relays feature a zero crossing magnetically latching relay designed for switching the harsh electrical loads associated with today's high efficiency lighting systems.

- Four (4) independently operating voltage free relay contacts
- 120 Vac and 277 Vac units
- 20 A rating
- Dimensions: 8.46 in. (215 mm) wide x 2.60 in. (66 mm) deep x 3.35 in. (85 mm) tall

Table 5.24: 20 Amp Relay

Catalog No.	Catalog Description	$ Price
SLC5504TRVF20	4 Channel Relay, 120 V, 20 A with power supply	**1320.00**
SLC5504TRVF20P	4 Channel Relay, 120 V, 20 A without power supply	**1142.00**
SLC5504HRVF20	4 Channel Relay, 277 V, 20 A with power supply	**1320.00**
SLC5504HRVF20P	4 Channel Relay, 277 V, 20 A without power supply	**1142.00**

8-Channel Low Voltage Relay

8-Channel Low Voltage Relay

The C-Bus 8-Channel Low Voltage Relay is a C-Bus output device that controls up to eight low voltage relay channels. The unit is powered from C-Bus and requires no other power source. The 8-Channel Low Voltage Relay can be used in many low voltage applications including controlling irrigation solenoids and low voltage damper solenoids for HVAC control. The unit can also be used in integrating 3rd party equipment through pulse signal controls.

- 8 channels of 2 A switched loads @ 30 Vac/dc
- 8 channels are all isolated change over relays
- Control of 3rd party products

Table 5.25: 8-Channel Low Voltage Relay

Catalog No.	Catalog Description	$ Price
SLC5108RELVP	8-Channel Low Voltage Relay	**298.00**

Phase Angle Dimmer
with Power Supply

Phase Angle Dimmers

C-Bus Phase Angle Dimmers are intended for controlling incandescent and compatible low-voltage and florescent lighting. Each of the unit's channels can independently control loads to create dynamic lighting scenes. These dimmer units automatically compensate for voltage and frequency fluctuations and employ advanced phase-control techniques to reduce flicker and increase lamp life.

- Four (4) independent channels supporting up to 4 A continuous load per channel, eight (8) independent channels supporting up to 2 A continuous load per channel
- Units available both with and without a 200 mA power supply on-board.
- 120 Vac
- Dimensions: 8.46 in. (215 mm) wide x 2.60 in. (66 mm) deep x 3.35 in. (85 mm) tall

Professional Dimmer

Professional Dimmer

C-Bus Professional Dimmers can control incandescent and compatible low-voltage and florescent lighting. These dimmers are ideal for larger heavily loaded circuits. Each channel provides independent dimming and incorporates thermal overload and over-current protection. These dimmer units automatically compensate for voltage and frequency fluctuations and employ advanced phase-control techniques to reduce flicker and increase lamp life.

An optional terminal box is available for conduit connections. Configuration options include network monitoring of the channel load and network voltages, adjustable delays for dimming levels, and master override.

- Specialized dimming modes—soft turn on/off and linear brightness control
- Built-in power supply sources 60 mA to the C-Bus network
- Individual channels can be turned On/Off at the unit or via C-Bus commands
- LEDs indicate the status of the network at the unit and the status of the unit's load and power
- Optional terminal box for connecting conduit
- 120 Vac
- Dimensions: 7.5 in. (190 mm) wide x 3.0 in. (75 mm) deep x 7.7 in. (195 mm) tall

Table 5.26: C-Bus Dimmers

Catalog No.	Catalog Description	$ Price
SLC5504TD4A	4 x 4 A dimmer, incan/mag,125 V, 4 A, with power supply	1024.00
SLC5504TD4AP	4 x 4 A dimmer, incan/mag,125 V, 4 A, without power supply	800.00
SLC5508TD2A	8 x 2 A dimmer, incan/mag,125 V, 2 A, with power supply	1024.00
SLC5508TD2AP	8 x 2 A dimmer, incan/mag,125 V, 2 A, without power supply	800.00
SLC5104TD5	4 x 5 A dimmer, incan/mag,125 V, with power supply	1926.00
SLC5102TD10	2 x 10 A dimmer, incan/mag,125 V, with power supply	1926.00
SLC5101TD20	1 x 20 A dimmer, incan/mag,125 V, with power supply	1926.00
SLCU5100TB	Termination box for SLCLU510X Series dimmer units	78.00

4 Channel
0–10 V Dimmer Unit

0–10 V Dimming Unit

The C-Bus Analog Output Unit provides four channels of analog 0–10 Vdc for controlling electronically dimmable fluorescent lighting ballasts.

- Produces four independently controllable channels of 0–10 Vdc for controlling dimmable flourescent lighting ballasts, or other 0–10 V controllable loads
- Individual channels can be turned ON/OFF at unit, via C-Bus commands, and through a remote override option
- 120 V or 277 Vac models available
- DIN style construction 4M wide: 3.4"(L) x 2.8"(W) x 2.6"(H)

Table 5.27:

Catalog No.	Catalog Description	$ Price
SLCLE5504TAMP	4 Channel 0–10 V Output, 120 V	624.00
SLCLE5504HAMP	4 Channel 0–10 V Output, 277 V	624.00

DALI Gateway

DALI Gateway

The C-Bus Digital Addressable Lighting Interface (DALI) Gateway provides an isolated two-way communications path between a C-Bus network and two DALI networks, making it possible to use C-Bus devices to control DALI ballasts.

- Provides two-way communications between C-Bus and DALI networks, routing selected messages from one to the other
- Unit is transparent and invisible to DALI ballasts
- Receives data and power over the network, so the unit does not require power packs or line-voltage connections
- DIN style construction 4M wide: 3.4"(L) x 2.8"(W) x 2.6"(H)

Table 5.28:

Catalog No.	Catalog Description	$ Price
SLC5502DAL	2 Channel DALI Gateway	1014.00

DMX Gateway

The C-Bus DMX Gateway is a DIN rail mounted unit that maps C-Bus Group Addresses and levels to a DMX-512 A interface.

The C-Bus DMX Gateway is a one way device. It permits C-Bus input devices such as keypads, DLTs and PIRs to control lighting devices with DMX interface capabilities. These include many manufacturers of LED fixtures and theatrical lighting equipment.

- Includes DMX interface (bootlace connnectors to 5-pin female XLR)
- DMX Master device
- Receives data and power over the C-Bus network, so the unit does not require a line voltage connection
- DIN style construction 4M wide: 3.4" (L) x 2.8" (W) x 2.6" (H)

Table 5.29:

Catalog No.	Catalog Description	$ Price
SLC5500DMX	C-Bus to DMX Gateway	936.00

Network Bridge

Network Bridge

The C-Bus Network Bridge provides a communication channel between C-Bus units on separate networks, expanding the total number of units that can be configured, controlled, and monitored.

- Increases transmission distances by acting as a repeater station for data transmission
- Expands the total number of C-Bus devices that can operate on the system by isolating devices to individual networks
- Indicates each network's status level
- Uses built-in connectors to connect to a C-Bus network
- Compatible with Powerlink G3 3000C controller and all C-Bus components, including keypads, sensors, and dimmers
- DIN style construction 4M wide: 3.4"(L) x 2.8"(W) x 2.6"(H)

Power Supply

Power Supply

The C-Bus Power Supply is specifically designed to operate with the C-Bus network as a power source for passive C-Bus devices. Up to five power supplies can be connected to a single C-Bus network.

- Available in 120 and 277 Vac models
- Regulating power supply compensates for line voltage and frequency variations, so there is constant output
- Sources up to 350 mA to the C-Bus network
- UL listed to operate in parallel with other Clipsal power supplies, up to five on a single C-Bus network
- Incorporates short circuit and reverse polarity protection
- DIN style construction 4M wide: 3.4”(L) x 2.8”(W) x 2.6”(H)

PC Interface

PC Interface

The C-Bus PC Interface (PCI) expands options for configuring, controlling, and monitoring C-Bus networks by providing an interface between the network and a personal computer (PC). The C-Bus PCI module easily mounts to a DIN rail and connects to the C-Bus network. Power to the unit is provided through the C-Bus network.

Serial

- Unit/Comms LED shows the status of the unit’s power and of any data transmissions
- Three RS-232 serial connectors for connecting to a PC or to external devices: (1) 9-pin D-type serial connector (female) and (2) 8-pin RJ-45 connectors
- Two C-Bus network connector ports: RJ-45 sockets
- Data cable for connecting PCI and personal computer, including DB9 connectors

USB

- Unit/Comms LED shows the status of the unit’s power and of any data transmissions
- Two C-Bus network connector ports: RJ-45 sockets
- USB PC connection
- Data cable for connecting PCI and personal computer

Pascal Automation Controller

C-Bus Pascal Automation Controller (PAC) provides extended conditional and real-time event programming to C-Bus systems. The PAC supports a full range of programming commands including conditional logic, flow control variables and scheduling.

Systems integrators will appreciate the built-in scheduling tools, scene tools, and wizards for creating basic logic programs. Full programming capabilities can be achieved utilizing the free-form script editor based off the pascal programming language.

- Connects directly to C-Bus network
- Powered from the C-Bus network
- USB port for connection to personal computer
- (2) RS232 ports for third party device control
- Real time, astronomical and C-Bus system clock included with 24 hour internal capacitor backup and external 12 Vdc battery terminals

Programming capabilities including: i.e. Conditional logic (if, then, and, or, not, etc.), Flow Control (for, repeat, while), Variables (integer, real, Boolean, character, string), Control and monitoring of group addresses, Control and monitoring of scenes.

Ethernet Network Interface

Ethernet Network Interface

The C-Bus Ethernet Network Interface unit is a C-Bus system device designed to provide an isolated communications path between an Ethernet 10Base-T Network and a C-Bus Network. This allows high-speed control and monitoring of a C-Bus installation via the TCP/IP protocols used in computer networks and by the Internet. System integrators and installers will also benefit from having remote access to the system. With the C-Bus Ethernet Network Interface unit, access to a single or multiple networks can be as close as the nearest Ethernet connection.

- Remote access to Clipsal systems
- Bridge multiple C-Bus networks together over LAN or WAN
- Fully supports all Clipsal commands
- Small size, mounts in standard DIN enclosure (4M wide)
- Includes 12 Vdc power supply


Telephone Interface Unit

Telephone Interface Unit

C-Bus Telephone Interface Unit offers a dial-in and dial-out capability for control of a C-Bus system. Remote location override, monitoring, diagnostics and configuration of a C-Bus system is possible with this unit. The C-Bus Telephone Interface Unit is programmed using a connection to a PC running TICA (Telephone Interface Commissioning Application) configuration software. The interface can also act as a C-Bus PC Interface. The Telephone Interface Unit can be installed in a C-Bus 36 or 60M enclosure or as a wall mountable stand-alone item with connection to C-Bus.

- Remote location override
- Voice prompts and confirmation
- Password protected
- 32 supported devices
- Automatic dial out on present conditions
- Local or remote site access to C-Bus system
- Audio Out

Bar Code Reader

The C-Bus Bar Code Reader allows installers and integrators to quickly scan C-Bus devices with serial numbers and import them into C-Bus Toolkit software. Using a USB connection to a PC, users can easily identify and track C-Bus Unit locations on a floorplan/network.

Network Analyzer

The C-Bus Analyzer is a C-Bus device designed to help an installer quickly analyze, detect, and troubleshoot potential problems on a C-Bus network. The device analyzes the network parameters and prompts the user for appropriate actions via its front LED (Light Emitting Diode) indicators.

Table 5.30: System Units

Catalog No.	Catalog Description	$ Price
SLC5500NB	Network bridge	**663.00**
SLC5500TPS	120 V Power supply, 350 mA	**500.00**
SLC5500HPS	277 V Power supply, 350 mA	**500.00**
SLC5500PC	RS-232 PC Interface	**488.00**
SLC5500PCU	USB PC Interface	**488.00**
SLC5500PACA	Pascal Automation Controller	**586.00**
SLC5500CN	Ethernet Network Interface	**664.00**
SLC5100TUS	Telephone Interface Unit	**898.00**
Accessories		
SLC5100BCS	Bar Code Reader	**604.00**
SLC5100NA	C-Bus Network Analyzer	**328.00**


8M Enclosure

8M Enclosure

The 8M enclosure is specifically designed for distributed applications. Suitable for surface mounting, the 8M enclosure consists of a box with a cover and a DIN rail for mounting one 8M or two 4M C-Bus units. The enclosure also has provisions for mounting neutral and ground bars.

- Surface-mount NEMA 1 enclosure
- Welded sheet steel with knockouts
- Gray baked enamel, electrodeposited over cleaned, phosphatized steel
- Triple-lead cover screws for fast installation of cover
- DIN rail, suitable for mounting one 8M or two 4M C-Bus DIN modules

12M Enclosure

12M Enclosure

The 12M enclosure is specifically designed for distributed applications that require physical proximity between DIN units and keypads, sensors or controlled loads. Suitable for surface mounting, the 12M enclosure consists of a box with a cover and a DIN rail for mounting three 4M C-Bus units, one 8M unit plus one 4M unit or one 12M unit. The enclosure also has factory mounted neutral and ground bars.

- Surface-mount NEMA 1 enclosure
- Welded sheet steel with knockouts
- Gray baked enamel, electrodeposited over cleaned, phosphatized steel
- Triple-lead cover screws for fast installation of cover
- DIN rail, suitable for mounting one 12M or three 4M C-Bus DIN modules

24M Enclosure

24M Enclosure

The 24M enclosure is specifically designed for distributed applications that require physical proximity between DIN units and keypads, sensors or controlled loads. Suitable for surface mounting, the 24M enclosure consists of a box with a cover and two rows for mounting C-Bus DIN-mounted C-Bus units. Each row can hold one 12M unit, one 8M unit plus one 4M unit, or three 4M untis. The enclosure also has provisions for additional neutral and ground bars.

- Surface-mount NEMA 1 enclosure
- Welded sheet steel with knockouts
- Gray baked enamel, electrodeposited over cleaned, phosphatized steel
- Triple-lead cover screws for fast installation of cover
- DIN rail, suitable for mounting Clipsal DIN-mounted C-Bus units. Each row can hold one 12M unit, one 8M unit plus one 4M unit, or three 4M units


36M Enclosure

36M and 36MS Enclosure

The 36M and 36MS enclosures provide a multi-purpose means for housing various C-Bus DIN-mounted devices. Suitable for flush or surface mounting, the enclosure consists of a mounting pan assembly, and a cover assembly. The box is to be ordered separately, allowing for its installation with the rough-in of field wiring. Enclosures feature:

- NEMA 1 enclosure suitable for flush or surface mounting
- Welded sheet steel with knockouts
- Gray baked enamel paint, electrodeposited over cleaned, phosphatized steel
- Triple-lead cover screws for fast installation of cover
- 3 DIN mounting rails, each accommodating up to one 12M unit, one 8M unit with one 4M unit, or three 4M units
- Complete with barriers for separation of Class 2 circuits from line voltage (36M only)
- The 36MS offers a reduced footprint than the 36M

60M Enclosure

The 60M enclosure provides a means for housing DIN style relays and dimmers. Suitable for flush or surface mounting, the enclosure consists of a mounting pan assembly, and a cover assembly. The box is to be ordered separately, allowing for its installation with the rough-in of field wiring. Enclosures feature:

- NEMA 1 enclosure suitable for flush or surface mounting
- Welded sheet steel with knockouts
- Gray baked enamel paint, electrodeposited over cleaned, phosphatized steel
- Triple-lead cover screws for fast installation of cover
- 5 DIN mounting rails, each accommodating up to one 12M unit, one 8M unit with one 4M unit, or three 4M units
- Complete with barriers for separation of Class 2 circuits from line voltage

Table 5.31: Enclosures and Accessories

Catalog No.	Catalog Description	$ Price
8M Enclosure		
SLC8M	C-Bus single row enclosure, surface mount	110.00
12M Enclosure		
SLC12MSG	C-Bus single row enclosure, surface mount	120.00
24M Enclosure		
SLC24MSG	C-Bus dual row enclosure, surface mount	240.00
36MS Enclosure		
SLC36SC	C-Bus box for small three row interior	120.00
SLC36MSFG	C-Bus small three row interior with flush gray cover	690.00
SLC36MSFW	C-Bus small three row interior with flush white cover	690.00
SLC36MSSG	C-Bus small three row interior surface mount gray cover	690.00
36M Enclosure		
SLC36C	C-Bus box for three and five row interiors	136.00
SLC36MFG	C-Bus three row interior with gray cover, flush mount	740.00
SLC36MFW	C-Bus three row interior with white cover, flush mount	740.00
SLC36MSG	C-Bus three row interior surface gray	740.00
60M Enclosure		
SLC36C	C-Bus box for three and five row interiors	136.00
SLC60MFG	C-Bus five row interior with gray cover, flush mount	1233.00
SLC60MFW	C-Bus five row interior with white cover, flush mount	1233.00
SLC60MSG	C-Bus five row interior surface gray	1233.00
Accessories		
PK7GTA	Ground/Neutral Bar	7.80
PKGTAB	Neutral Insulator Kit	29.20
SLC4CSF8	Filler Plate, 4M	18.00

Area Lighting Panels

Area Lighting Panel

C-Bus Area lighting Panels are ideally suited to meet lighting control energy code requirements in classrooms, offices and other small spaces. Area Lighting Panels are designed to be used with C-Bus input units, including: keypads, sensors (occupancy and light level detection) and touch screens. A simple CAT-5 cable is all that is required for connecting of these devices.

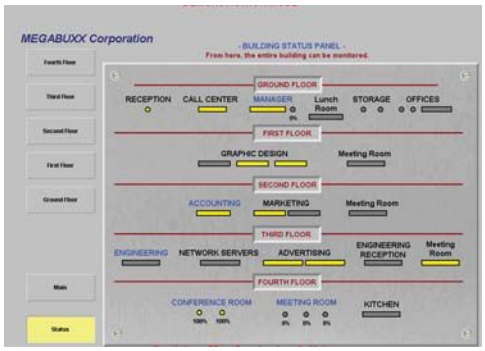
C-Bus Area Lighting Panels provide on/off switching, stepped dimming or continuous dimming. All relays feature rugged 20 A rated contacts for switching electronic ballast loads. Models with continuous dimming capabilities are available with phase angle or 0–10 V control. C-Bus Area Lighting Panels can operate independently or as part of an entire facility wide lighting control system. Enclosures can easily be mounted in electrical closets or in ceiling spaces. They include all necessary connections and are UL® Listed. Area Lighting Panels can also be used in conjunction with Powerlink™ panels.

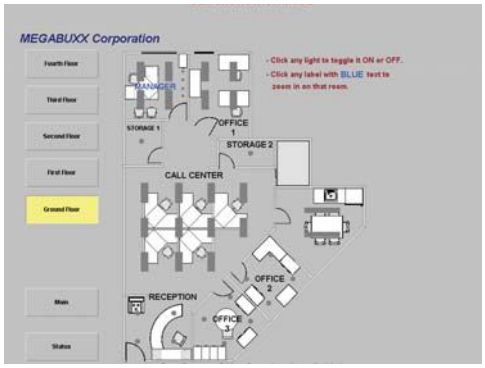
- Relay models: Four (4) or Eight (8) channel relay outputs, rated 20 A
- Phase Angle Dimmer Model: Four (4) channels of 4 A outputs for incandescent lighting loads.
- 0–10 V outputs available for control of compatible 0–10 V dimmable fluorescent ballasts, or LED drivers
- Integral neutral and ground bar terminal strips
- Meets NEC 300.22 requirements to be installed above ceilings and other spaces that handle environmental air
- Bypass mode to facilitate quick start up
- Meets NEC Article 409
- UL Listed 508 A

Table 5.32: C-Bus Area Lighting Panels

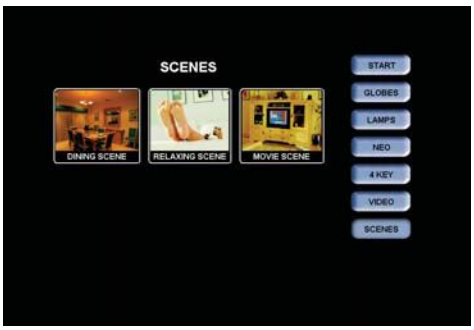
Catalog No.	Description	$ Price
4 Channel 20 A Relay Models		
SLCZ042000T	4 Channel 20 A Relay @ 120 V with power supply▲	1769.00
SLCZ042000H	4 Channel 20 A Relay @ 277 V with power supply▲	1769.00
SLCZ042000TP	4 Channel 20 A Relay @ 120 V without power supply	1675.00
SLCZ042000HP	4 Channel 20 A Relay @ 277 V without power supply	1675.00
8 Channel 20 A Relay Models		
SLCZ082000T	8 Channel 20 A Relay @ 120 V with power supply▲	2646.00
SLCZ082000H	8 Channel 20 A Relay @ 277 V with power supply▲	2646.00
SLCZ082000TP	8 Channel 20 A Relay @ 120 V without power supply	2462.00
SLCZ082000HP	8 Channel 20 A Relay @ 277 V without power supply	2462.00
4 Channel 20 A Relay Models with 0-10 V Output Units		
SLCZ04204AT	4 Channel 20 A Relay @ 120 V with power supply and 4 Channel 0–10 V Output Unit▲	2492.00
SLCZ04204AH	4 Channel 20 A Relay @ 277 V with power supply and 4 Channel 0–10 V Output Unit▲	2492.00
SLCZ04204ATP	4 Channel 20 A Relay @ 120 V without power supply and 4 Channel 0–10 V Output Unit	2308.00
SLCZ04204AHP	4 Channel 20 A Relay @ 277 V without power supply and 4 Channel 0–10 V Output Unit	2308.00
4 Channel 20 A Phase Angle Dimmer Models		
SLCZ00004DT	4 Channel 20 A Phase Angle Dimmer @ 120 V with C-Bus power supply▲	1144.00
SLCZ00004DTP	4 Channel 20 A Phase Angle Dimmer @ 120 V without C-Bus power supply	920.00
4 Channel 20 A Relay Models with Phase Angle Dimmer Units		
SLCZ04204DT	4 Channel 20 A Relay @ 120 V with C-Bus power supply and 4 Ch. Phase Angle Dimmer Unit▲	2630.00
SLCZ04204DTP	4 Channel 20 A Relay @ 120 V without C-Bus power supply and 4 Ch. Phase Angle Dimmer Unit	2182.00

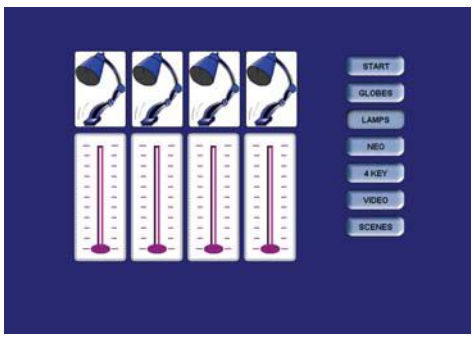
▲ For stand-alone applications order unit with power supply.





Schedule Plus Software Screen Captures





HomeGate Software Screen Captures

C-Bus Toolkit Software

The C-Bus Toolkit Software includes the C-Bus Installation and programming Software, Project Manager, and C-Bus Calculator. The software works under Windows™ 98, ME, 2000 and XP and supports a unique barcode scanning feature. This allows the installer to scan the C-Bus packaging of each new unit to add the unit to the database. The software prints adhesive labels that can be affixed to building plans. These labels include the Unit Address and the physical location that the unit is to be installed. Labels are duplicated so that one label can be affixed to the unit and one to the electrical plan for the installation. The labels have barcodes on them so that units can be easily re-identified if required.

NOTE: *C-Bus Toolkit Software is a free download from http://www.schneider-electric.us/solutions/lighting-and-whole-home-control/*

Schedule Plus Software V.4

C-Bus Schedule Plus Version 4 includes a number of major features, including enhanced scheduling features, support for monitoring load run times, load power and energy consumed, support for fully customizable multilevel, password protected, access level control, support for sunrise and sunset times, support for daylight saving times, support for 128 bit encrypted secure Internet connectivity allowing control and monitoring via any Web Browser. The software also includes a graphic display as well as a fully featured programmable logic engine. The USB Code Key works under Windows XP Home, XP Professional, Server 2003, Vista Ultimate, Vista Business and Vista Enterprise.

NOTE: *An evaluation version of Schedule Plus is available for download by going to http://www.schneider-electric.us/solutions/lighting-and-whole-home-control/ and clicking Software Downloads in the far-left column.*

HomeGate Software V.4

Residential application PC control of a C-Bus Control System. C-Bus HomeGate Version 4 includes a number of major features, including support for 128 bit encrypted secure Internet connectivity allowing control and monitoring via any Web Browser, irrigation system control feature, enhanced scheduling features, support for sunrise and sunset times, support for daylight saving times. The software also includes a fully featured programmable logic engine. The C-Bus USB Key works under Windows XP Home, XP Professional, Server 2003, Vista Ultimate, Vista Business and Vista Enterprise.

NOTE: *An evaluation version of HomeGate is available for download by going to http://www.schneider-electric.us/solutions/lighting-and-whole-home-control/ and clicking Software Downloads in the far-left column.*

Installer License Key

The C-Bus Software Installer License Key is a valuable tool for installers to create/commission projects using C-Bus Version 4 Schedule Plus & HomeGate software. This code key is time restricted and allows the software to operate in 'normal' mode for anywhere between 48 to 72 hours per use (the software then returns to evaluation/demo mode).

NOTE: *The installer code key will also be compatible with future software releases.*

Table 5.33:

Catalog No.	Catalog Description	$ Price
Schedule PlusV. 4		
SLC5000SDSP24	License Key for 2 Networks	**792.00**
SLC5000SDSP104	License Key for 10 Networks	**1680.00**
SLC5000SDSPU4	License Key for Unlimited Networks	**2665.00**
HomeGate V. 4		
SLC5000SDHG24	License Key for 2 Networks	**352.00**
SLC5000SDHG104	License Key for 10 Networks	**680.00**
SLC5000SDSP24	Installer key for Schedule Plus or Homegate (unlimited networks)	**389.00**


Wall Switch Occupancy Sensor

Basic Wall Switch Occupancy Sensors

Wall Switch Occupancy Sensors are ideally used in commercial buildings to save energy that would otherwise be wasted to light unoccupied rooms or spaces. These Wall Switch Occupancy Sensors employ the latest in passive infrared (PIR) sensing technology to accurately sense when a room or space is occupied, then turn lights on. When the room is unoccupied, the sensor turns lights off after a time delay of up to 30 minutes as determined by the user. Auto-ON and Manual-ON models available with decorator wall plate in White, Ivory or Light Almond. Simply mount the sensor in place of existing single gang switch — no neutral connection required. Special multi-segmented lens creates a coverage pattern that accurately detects major motion in rooms up to 1000 sq. ft.

- Input: 120/277 Vac 60 Hz
- Output: 1000W Max. Load @ 120 V (1000 VA@120 V 1800 VA@277 V)
- 1/4 HP Max. Motor Load
- UL and cUL Listed
- For use with electronic and magnetic ballasts
- CEC Title 24 Certified


Commercial Grade Wall Switch

Commercial Grade Wall Switch Occupancy Sensors

Maximum energy savings in a format that will complement any decor. Low profile sensors are available in white, ivory, gray, light almond and black with color-matched segmented lens.

Light Level Sensor Mode: Each sensor includes an adjusatble light level sensor to hold off artificial lighting when adequate natural light is present.

Walk-Through Mode: To maximize energy savings, the sensor detects when areas are briefly occupied as a result of a person walking through and turns off lighting based on a shorter time delay. Walk-Through Mode is available on single and dual circuit units.

Lamp Saver Mode: When the lamp saver feature is enabled, the sensor automatically alternates which load responds to motion. The result is more predictable lamp life and reduced maintenance. (Dual circuit only)

Adaptive Technology: Commercial Grade dual technology and ultrasonic wall switch occupancy sensors feature a patented adaptive technology that significantly reduces the learning period typically associated with adaptive sensors. Adaptive Sensors from Schneider Electric reduce the occurrence of nuisance on and nuisance off while at the same time extending lamp life and reducing maintenance.

- Available in white, ivory, gray, light almond and black with matching cover plate (included)
- Color matching multi-segmented lens
- Audible alert
- Selectable auto-on and manual-on modes
- Red LED motion indicator
- For use with electronic and magnetic ballasts
- 1000 VA@120 V, 1800 VA@277 V
- User adjustable light level, time delay, and sensitivity
- 30 second grace period in the manual-on mode


Blank Cover Plate with decorator style opening


Toggle Cover Plate with decorator style opening

Residential Wall Switch Vacancy Sensors

The Residential Vacancy Sensor directly replaces standard light switches in bathrooms, garages, laundry rooms and utility rooms in accordance with Title 24 2005 requirements for residential lighting (Sections 119(d) and 150 (k)). Vacancy Sensors from Schneider Electric operate just like a standard light switch, requiring a button press to turn lights on. Lights may be turned off with a button press or the sensor will turn off lighting automatically when the area is unoccupied.

- No user time delay and sensitivity adjustments necessary
- Available in White, Ivory or Light Almond
- Furnished with cover plate
- Manual On/Manual Off or Automatic Off operation
- No neutral or minimum load required
- Rated for both 120 V incandescent and fluorescent lighting
- Title 24 2005 Residential Lighting requirements, Sec. 150(k)
- No override on
- Manual-on only (no auto-on mode)
- 30 minute time delay

Table 5.34:

Catalog No.	Catalog Description	$ Price
Basic Wall Switch Occupancy Sensors		
Auto-ON/Auto-OFF		
SLSPWS1277AL	Light Almond Wall Switch Occupancy Sensor	81.00
SLSPWS1277AW	White Wall Switch Occupancy Sensor	81.00
SLSPWS1277AI	Ivory Wall Switch Occupancy Sensor	81.00
Manual-ON/Auto-OFF		
SLSPWS1277ML	Light Almond Wall Switch Occupancy Sensor	62.00
SLSPWS1277MW	White Wall Switch Occupancy Sensor	62.00
SLSPWS1277MI	Ivory Wall Switch Occupancy Sensor	62.00
Residential Vacancy Sensor		
SLSPWS120VL	Wall switch vacancy sensor, light almond	42.00
SLSPWS120VI	Wall switch vacancy sensor, ivory	42.00
SLSPWS120VW	Wall switch vacancy sensor, white	42.00
Commercial Grade Wall Switch Occupancy Sensors		
Single Circuit PIR		
SLSPWS1277UW	White	90.00
SLSPWS1277UI	Ivory	90.00
SLSPWS1277UG	Gray	90.00
SLSPWS1277UL	Light Almond	90.00
SLSPWS1277UB	Black	90.00
Dual Circuit PIR		
SLSPWD1277UW	White	117.00
SLSPWD1277UI	Ivory	117.00
SLSPWD1277UG	Gray	117.00
SLSPWD1277UL	Light Almond	117.00
SLSPWD1277UB	Black	117.00
Single Circuit Ultrasonic		
SLSUWS1277UW	White	142.00
SLSUWS1277UI	Ivory	142.00
SLSUWS1277UG	Gray	142.00
SLSUWS1277UL	Light Almond	142.00
SLSUWS1277UB	Black	142.00
Dual Circuit Ultrasonic		
SLSUWD1277UW	White	165.00
SLSUWD1277UI	Ivory	165.00
SLSUWD1277UG	Gray	165.00
SLSUWD1277UL	Light Almond	165.00
SLSUWD1277UB	Black	165.00
Single Circuit Dual Technology		
SLSDWS1277UW	White	187.00
SLSDWS1277UI	Ivory	187.00
SLSDWS1277UG	Gray	187.00
SLSDWS1277UL	Light Almond	187.00
SLSDWS1277UB	Black	187.00
Dual Circuit Dual Technology		
SLSDWD1277UW	White	210.00
SLSDWD1277UI	Ivory	210.00
SLSDWD1277UG	Gray	210.00
SLSDWD1277UL	Light Almond	210.00
SLSDWD1277UB	Black	210.00
Blank Cover Plates		
SLSWP2DBW	White	7.50
SLSWP2DBI	Ivory	7.50
SLSWP2DBG	Gray	7.50
SLSWP2DBL	Light Almond	7.50
SLSWP2DBB	Black	7.50
Toggle Cover Plates		
SLSWP2DTW	White	7.50
SLSWP2DTI	Ivory	7.50
SLSWP2DTG	Gray	7.50
SLSWP2DTL	Light Almond	7.50
SLSWP2DTB	Black	7.50
Buttonless Cover Plates		
SLSBCW	Buttonless Adjustment Access Covers, White	15.00
SLSBCI	Buttonless Adjustment Access Covers, Ivory	15.00
SLSBCG	Buttonless Adjustment Access Covers, Gray	15.00
SLSBCL	Buttonless Adjustment Access Covers, Light Almond	15.00
SLSBCB	Buttonless Adjustment Access Covers, Black	15.00

Dual Technology Wall Mount

Dual Technology Ceiling Mount

Power Pack

Wall Mount Occupancy Sensors

Wall Mount Occupancy Sensors from Schneider Electric accurately detect occupancy and automatically switch lighting on and off as needed. These sensors are wall or ceiling mounted for superior motion detection. Sensors employ Passive Infrared (PIR) and Ultrasonic technology. Dual Technology model features combined PIR and Ultrasonic detection for the ultimate performance. The PIR Occupancy Sensor has 3 interchangeable lenses for custom coverage patterns. Wide Angle, Long Range and High Bay. Wall mount sensors also incorporate an integral light level sensor, and features an isolated relay for use with building automation, security and HVAC systems.

- Adjustable Sensitivity
- Adjustable time delay
- UL and cUL Listed
- CEC Title 24 Certified
- FCC Part 15, Class B
- ASHRAE/IES 90.1

Table 5.35: Wall Mount Occupancy Sensors

Catalog No.	Catalog Description	$ Price
SLSWPS1500	PIR occupancy sensor	161.00
SLSWUS1500	Ultrasonic occupancy sensor	191.00
SLSWDS1500	Dual Technology occupancy sensor	221.00

Ceiling Mount Occupancy Sensors

Ceiling Mount Occupancy Sensors are ideal for offices, conference rooms, class rooms and other shared areas to automatically turn lights on and off based on occupancy. Sensors employ Passive Infrared (PIR) and Ultrasonic technology. Dual Technology model features combined PIR and Ultrasonic detection for the ultimate performance. Requires power pack. Set of normally closed and normally opened auxiliary contacts for use with building automation and security systems.

- Input: 24 Vdc
- Output: +24 Vdc
- Adjustable Sensitivity
- Low Profile Housing
- Adjustable Light Level Sensor
- UL and cUL Listed
- CEC Title 24 Certified
- FCC Part 15, Class B
- ASHRAE/IES 90.1

Table 5.36: Ceiling Mount Occupancy Sensors

Catalog No.	Catalog Description	$ Price
SLSCPS1000	PIR occupancy sensor	134.00
SLSCUS2000	Ultrasonic occupancy sensor	197.00
SLSCDS2000	Dual Technology occupancy sensor	231.00
SLSCUS800	180 Degree Ultrasonic sensor	129.54
SLSCDS800	180 Degree Dual Technology Sensor (PIR and Ultrasonic Sensors combined)	141.76

Power Pack

For use with wall and ceiling mount sensors to supply power to sensor and switch the load when the sensor detects occupancy. May supply power to multiple sensors and auxiliary relays up to 100 mA nominal load.

- Input: 120/277 Vac 50/60 Hz
- Output: 24 Vdc/100 mA Nom.
- Relay rating: 20 A Max. Ballast Load at 120 Vac (20 A Max. at 277 V)
- UL cUL Listed

In Canada:

- Input: 347 Vac60 Hz
- Output: 24 Vdc/150 mA Nominal
- Relay rating: 15 A Max. Ballast Load at 347 Vac (15 A Max. at 5200 watts)
- UL cUL Listed

Auxiliary Relay

For use with wall and ceiling mount sensors to turn lights on when an area is occupied or off when it is not. Requires power pack to supply input power to operate relay.

- Input: 24 Vdc/36 mA Nom.
- Relay rating: 20 A Max. Ballast Load at 120 Vac (20 A Max. at 277 V)
- UL cUL Listed

In Canada:

- Input: 24 Vdc/2 mA Nominal
- Relay rating: 15 A Max. Ballast Load at 347 Vac

Table 5.37: Power Pack and Auxiliary Relay

Catalog No.	Catalog Description	$ Price
SLSPP1277	120–277 Vac Power Pack	46.50
SLSSP24	120–277 Vac Auxiliary Relay	36.00
SLSPP1347	347 Vac Power Pack	47.50
SLSSP24347	347 Vac Auxiliary Relay	36.00

Indoor Occupancy Sensor

Fixture Mounted Sensors and Controls

Schneider Electric extends its occupancy-sensing capability with a range of line voltage sensors based on passive infrared (PIR) technology. These sensors feature rugged housings that resist moisture and dust typical of manufacturing and shipping dock areas. Sensors incorporate universal power supply, relay and PIR element in a single housing ready for direct attachment to popular high-bay and low-bay luminaires.

Sensors are available either as stand alone sensor-per-fixture devices or equipped with connectors for low-cost plastic optical fiber cable. Plastic optical fiber connectivity between sensors allows implementation of control zones within aisles and work areas without back-pulling signaling wire in conduit. Each sensor acts as a network repeater, allowing 200 foot spacing between sensors. Plastic fiber can be cut and terminated without special tools or installer training.

- All sensors feature oversized Fresnel lenses and premium, low-noise pyroelectric elements for reliable PIR sensing at mounting heights up to 45 feet.
- Both area- and aisle-sensing Fresnel lenses ship with each sensor. Color-coded snap-out lenses can be swapped in the field.
- Switch packs open and close based on fiber optic commands from fiber sensors
- Universal power supply design adapts to 120–480 Vac, 50/60 Hz without jumpers or taps.
- Single-pole/close-on-motion relays sized for switching dry contact, magnetic HID or electronic ballast loads.
- Mounts directly to reflector with included pinch bracket or to ballast housing with ” NPT threaded pipe nipple.
- Built-in manual override test switch and diagnostic LED to assist in installation. Diagnostic LED can be seen at distance to assist in walk test.
- Fifteen minute power ON warm-up timer assures rated lamp life even if the fiber network is broken.
- User adjustable sensitivity and delay time settings (0–15 minutes)

Table 5.38: Table Line Voltage Occupancy Sensors

Catalog No.	Catalog Description	$ Price
SLSPIP210	Occupancy sensor, indoor PIR, no fiber connectivity	141.00
SLSPIP210CT	Occupancy sensor, indoor PIR, no fiber, cold temperature	174.00
SLSPIP210EB	Occupancy sensor, indoor PIR, no fiber, electronic ballast	141.00
SLSPIP210EBCT	Occupancy sensor, indoor PIR, no fiber, electronic ballast cold temperature	174.00
SLSPIP211	Occupancy sensor, indoor PIR, one fiber input, one fiber output	166.00
SLSPIP212	Occupancy sensor, indoor PIR, two fiber inputs	166.00
SLSPSP101	Fiber optic switch pack, indoor, one fiber in, one fiber output	141.00
SLSPSP102	Fiber optic switch pack, indoor, two fiber inputs	141.00
SLSPCW001	Fixture-mounted counterweight for HID	13.00
SLSPIPBRACKET	Bracket for off-fixture mounting	11.00

New!

Fluorescent High Bay Sensor

Fluorescent High Bay Sensors

The SLSFPS1347 and SLSFPS1480 Occupancy Sensors are Class 1, fixture mounted, 360° high bay occupancy sensors. They are designed to operate directly with T5 and T8 fluorescent fixtures that use single or multiple electronic ballasts. Motion is detected using passive infrared technology (PIR). The operation voltage range for the SLSFPS1347 Sensor is 120–347 V. The SLSFPS1480 Sensor operates at 480 V.

Features

- Includes a user-adjustable time dial to set the length of time the luminaires stay on from 15 seconds to 30 minutes.
- Includes a user-adjustable range dial to customize PIR sensitivity.
- Includes a user-adjustable time dial to set the length of time the luminaires stay on from 15 seconds to 30 minutes.
- Includes a user-adjustable range dial to customize PIR sensitivity.
- 90 degree rotating lens for a variety of aisle-way applications.
- High bay area, low bay area, and high bay aisle lenses provided.
- 18 minutes time-out preset for maximum energy to lamp life savings.

Table 5.39: Specifications

Catalog No.	Catalog Description	$ Price
SLSFPS1347	120–347 Vac High bay Occupancy Sensor	78.00
SLSFPS1480	480 Vac High Bay Occupancy Sensor	89.00

New!

UL 924 Emergency Control Device

UL 924 Emergency Control Devices

Schneider Electric UL 924 Emergency Lighting Control Devices provide the ability to use and control standard fixtures for emergency and standard lighting. The use of UL 924 emergency lighting control device, under normal operating power the devices turn on and off emergency lighting along with standard lighting in an area. In the event of normal power loss the UL 924 emergency lighting control devices detect the power loss, and will automatically transfer emergency power to the fixtures. This provides emergency lighting through standard fixtures. Schneider Electric provides a wide selection of UL 924 emergency lighting control devices that work with occupancy and dimming based lighting control.

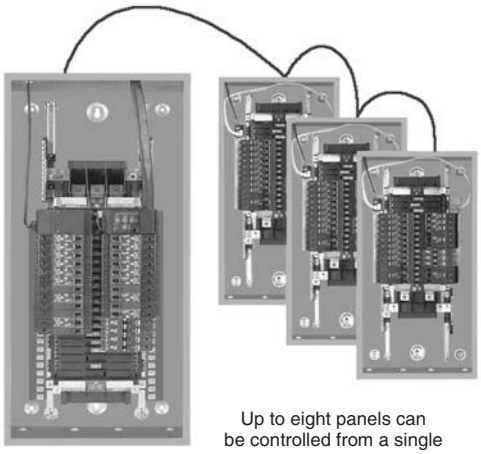
Features

- Saves energy by controlling Emergency Lighting
- Multiple mounting methods
- Convenient test switch
- Works with occupancy or dimmer controls
- Visible Power LED
- Easy to install

Table 5.40: Specificiations

Catalog No.	Catalog Description	$ Price
SLSEDC120	UL 924 Emergency Lighting Dimmer Control 120 Vac	700.00
SLSEDC277	UL 924 Emergency Lighting Dimmer Control 277 Vac	700.00
SLSEPMC120	UL 924 Emergency Lighting Control Relay Panel Mount 120 Vac	300.00
SLSEPMC277	UL 924 Emergency Lighting Control Relay Panel Mount 277 Vac	300.00
SLSERC1277	UL 924 Emergency Lighting Control Relay 120/277 Vac	300.00

Powerlink available in column width design



Up to eight panels can be controlled from a single controller.

Powerlink G3 systems are ideally suited for controlling lighting and other loads in commercial, institutional, and industrial facilities. Such systems are typically used to lower utility cost by switching branch circuits OFF during non-occupied periods when lighting is unnecessary or during peak demand periods when a partial reduction in load can save significant money.

These systems utilize remotely operated circuit breakers to switch branch circuits ON and OFF via a time schedule or by an externally generated signal (typically a low voltage wall switch, photocell, access system, fire alarm or building management system). All Powerlink components mount inside a standard lighting panelboard to provide a compact, space saving installation.

Powerlink G3 systems feature a powerful microprocessor based controller that provides system intelligence for 168 remotely operated branch circuits. Master panelboards contain the control electronics, power supply, and control bus strips for up to 42 branch circuit breakers. Slave panels extend the capability of the system by allowing remotely operated branch circuit breakers to be operated from the master controller via a simple, 4-wire, sub-net connection.

All Powerlink G3 systems have the capability of being networked together and operated from a central workstation or via a remote modem connection. Powerlink software allows users to remotely configure the system, change time schedules, monitor circuit breaker or input status, and override zones and breakers.

BACnet Capability

The Building Automation and Control network (BACnet) communication protocol is incorporated into the Powerlink™ G3 controller design. The addition of the BACnet protocol allows Powerlink panels to be easily integrated into a Building Automation System (BAS) employing this open communication standard without the need for communication bridges or gateways.

Controller Models

The following Powerlink G3 controller models support 'native' BACnet communications:

- NF2000G3 — Ethernet communications, shared remote inputs, network time synchronization
- NF3000G3 — Email upon alarm, onboard web pages for status/control/configuration
- NF3000G3C — C-Bus communications (ability to interface with a Clipsal™ lighting control network)

Factory Assembled System

The following factory engineered pricing procedure may be used to price either 240 V or 480Y/277 V Powerlink G3 systems:

- Select system type and interior size from Table 5.43 on 5-24. All Powerlink G3 panels are furnished with either 1 or 2 control bus strips.
- Select panelboard base price from Table 5.44. All Powerlink G3 panels use NF type panelboard interiors, boxes, and trims and are suitable for either 240 V or 480Y/277 V systems.
- Select branch circuit breaker requirements from Table 5.45. Powerlink G3 panels can accommodate both ECB-G3 remotely operated circuit breakers and EDB, EGB and EJB standard branch circuit breakers.
- Refer to panelboard section for additional panelboard accessories.
- For complete price, order by description.
- Apply appropriate discount schedule.

240 V Factory Assembled System Example:

500 level system with 225 A MLO panelboard rated for 208Y/120 V, 3Ø4W, 10kAIR, Type 1, surface mount with ground bar and (12) 20 A 1-pole bolt-on remote operated circuit breakers.

Table 5.41:

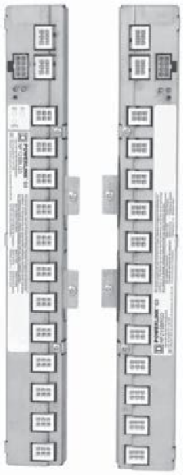
Item	Page No.	$ Price
System Type: 500 controller with 12 ckt bus	5-24	**5074.00**
Panel type: 250 A MLO	5-26	**864.00**
Branch circuit breakers: (12) 20 A 1-pole	5-26	**2628.00**
Ground bar	5-26	**28.50**
Total price		**8594.50**

Table 5.42:

Feature	System Level			
	500	1000	2000	3000
Inputs				
2 - wire	8	16	16	16
2 - wire with status feedback	8	8	8	8
3 - wire	8	8	8	8
Time Scheduler				
7 day, each configurable	—	16	16	16
Daily on/off periods	—	24	24	24
Holiday events	—	32	32	32
Automatic daylight savings	—	X	X	X
Sunrise/sunset tracking	—	X	X	X
Networking				
Modbus™ ASCII/RTU	X	X	X	X
Modbus TCP	—	—	X	X
Johnson Controls N2	—	X▲	—	—
DMX	—	X	X	X
C-Bus	—	—	—	X■
BACnet MSTP/IP	—	—	X	X

▲ Specify N2 suffix
■ Specify C suffix

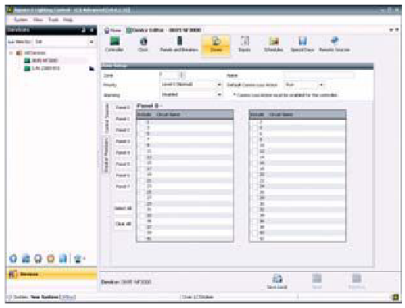
ECB-G3 Circuit Breaker



Control Bus

Power Supply

NF3000G3 Controller



Powerlink Software

Table 5.43: ECB-G3 Circuit Breakers Bolt-On Remotely Operated

Ampere Rating	One-Pole 27 7 Vac – 14,000 AIR 120 Vac – 65,000 AIR		Two-Pole 480Y/277 Vac – 14,000 AIR 120/240 Vac – 65,000 AIR 240 Vac – 14,000 AIR Ground B Phase		Three-Pole 480Y/277 Vac – 14,000 AIR 240 Vac – 42,000 AIR	
	Catalog Number	$ Price	Catalog Number	$ Price	Catalog Number	$ Price
15 20 30	ECB14015G3♦ ECB14020G3♦ ECB14030G3	237.00	ECB24015G3♦ ECB24020G3♦ ECB24030G3	558.00	ECB34015G3♦ ECB34020G3♦ ECB32030G3★	890.00

Table 5.44: ECB-G3 Circuit Breakers for Emergency Lighting (requires 2-pole spaces)

Ampere Rating	One-Pole 480 Y/277 – 14,000 AIR 240 V – 65,000 AIR	
	Catalog No.	$ Price
20	ECB142020G3EL	558.00

Note: All are listed as HACR type for use with air conditioning, heating and refrigeration equipment having motor group combinations and marked for use with HACR type circuit breakers. UL listed as HID rated for use with high intensity discharge lighting systems. (1) #12–8 Al or (1) #10–8 Cu. Suitable for use with 75°C conductors.

♦ UL listed as SWD (switching duty) rated.
★ Rated for 240 Vac only – 42,000 AIR

Table 5.45: Control Bus

Max. No. of Control Circuits	Required Interior Size	Panel Orientation	Catalog No.	$ Price
12 12	30 30	Left Right	NF12SBLG3 NF12SBRG3	851.00
18 18	42 42	Left Right	NF18SBLG3 NF18SBRG3	1065.00
21 21	54 54	Left Right	NF21SBLG3 NF21SBRG3	1163.00

Table 5.46: Power Supply

Voltage	Primary Source	Catalog No.	$ Price
120 V 240 V 277 V	Panel Bus Panel Bus Panel Bus	NF120PSG3 NF240PSG3 NF277PSG3	791.00
120 V 240 V 277 V	External External External	NF120PSG3L NF240PSG3L NF277PSG3L	899.00

Table 5.47: Controller

Description	Catalog No.	$ Price
500	NF500G3	1946.00
1000	NF1000G3	3968.00
1000N2 (N2 protocol)	NF1000G3N2	8288.00
2000	NF2000G3	7107.00
3000	NF3000G3	9741.00
3000C (C-bus	NF3000G3C	9741.00

Table 5.48: Remote Source Controller (for additional inputs)—

Includes NEMA 1 enclosure, source controller and power supply

Voltage	Catalog No.	$ Price
120 V	RSC16G3120	3045.00
240 V	RSC16G3240	3045.00
277 V	RSC16G3277	3045.00

Table 5.49: Cables & Accessories

Description	Catalog No.	$ Price
Control bus cables		
Harness standard panel	NF2HG3	89.00
Sub-net accessories & cables		
Slave address selector▼	NFSELG3	173.00
6' sub-net cable	NFSN06	75.00
10' sub-net cable	NFSN10	105.00
25' sub-net cable	NFSN25	234.00
50' sub-net cable	NFSN50	405.00
Serial cables		
Controller front panel cable	NFFPCG3	102.00

▼ One slave address selector required for each slave panel.

Table 5.50: Miscellaneous Hardware

Description	Catalog No.	$ Price
Circuit Breaker Handle Padlock (Lock On or Off)	HPAFD△	25.50
Fixed Barrier	NFASBKG3	177.00
Remote Mounting Adapter	NFADAPTERG3	102.00

△ DE2 Discount

Table 5.51: Software

Description	Catalog No.	$ Price
LCSAdvanced Software	LCSADVANCED	4000.00
LCSBasic Software	LCSBasic	1500.00
Powerlink Controller Software□	PCS101	1523.00

□ N2 supported controllers. All other controllers use LCSAdvanced or LCSBasic.

Remote Mount Controller

Device Power Supply

Powerlink Device Router

Table 5.52: Remote Mount Controller (for externally mounted electronics Includes NEMA 1 enclosure, controller, and power supply

Voltage	Catalog No.	Controller Type	$ Price
120 V	RMC500G3120	NF500G3	4272.00
240 V	RMC500G3240	NF500G3	4272.00
277 V	RMC500G3277	NF500G3	4272.00
120 V	RMC1000N2G3120	NF1000N2G3	10615.00
240 V	RMC1000N2G3240	NF1000N2G3	10615.00
277 V	RMC1000N2G3277	NF1000N2G3	10615.00
120 V	RMC1000G3120	NF1000G3	6990.00
240 V	RMC1000G3240	NF1000G3	6990.00
277 V	RMC1000G3277	NF1000G3	6990.00
120 V	RMC2000G3120	NF2000G3	9860.00
240 V	RMC2000G3240	NF2000G3	9860.00
277 V	RMC2000G3277	NF2000G3	9860.00
120 V	RMC3000G3120	NF3000G3	12680.00
240 V	RMC3000G3240	NF3000G3	12680.00
277 V	RMC3000G3277	NF3000G3	12680.00
120 V	RMC3000G3C120	NF3000G3C	12680.00
240 V	RMC3000G3C240	NF3000G3C	12680.00
277 V	RMC3000G3C277	NF3000G3C	12680.00

Device Power Supply

The Powerlink Device Power Supply is used to distribute power on a C-Bus™ network. Placed at critical points on the network, device power supplies will provide the current necessary for operating a variety of passive C-Bus devices. A Powerlink Device Power Supply consists of an 8M enclosure containing one or two 4M Power Supplies (120 or 277 Vac).

- Surface-mount NEMA 1 enclosure, with cover
- Unit and C-Bus LEDs indicate the status of the line voltage and the network
- Sources up to 700 mA (dual power supplies) to the C-Bus network
- 120 V or 277 Vac models available
- Dimensions: 8.9 in. (226mm) wide x 3.8 in. (97mm) deep x 12.57 (319mm) tall

Device Router

The Powerlink Device Router allows the exchange of data between a Powerlink NF3000G3C controller and C-Bus devices. This device router receives data from C-Bus input devices such as keypads and touchscreens and sends data to the Powerlink system and isa versa. The device router consists of a C-Bus 8M enclosure containing a C-Bus PC Interface and a C-Bus Power Supply (120 Vac or 277 Vac). Communication between the device router and the NF3000G3C controller is made with the included 50-foot serial cable.

- Surface-mount NEMA 1 enclosure, with cover
- Unit, Unit/Comms, and C-Bus LEDs indicate the status of data transmission and power to the unit and the network
- System network clock for synchronizing communications data
- Network power source, supplying up to 350 mA
- 120 Vac or 277 Vac models available
- Dimensions: 8.9 in. (226mm) wide x 3.8 in. (97mm) deep x 12.57 in. (319mm) tall

Table 5.53: Powerlink Device Routers▲

Description	Catalog No.	$ Price
120 V Device Router	NFDR120G3C■	1632.00
277 V Device Router	NFDR277G3C■	1632.00

▲ Required for interface to Clipsal units.
■ DE-8 Discount.

Table 5.54: Powerlink Device Power Supplies♦

Description	Catalog No.	$ Price
Single Supply 120 V	NFDP1120G3C★	900.00
Dual Supply 120 V	NFDP2120G3C★	1650.00
Single Supply 277 V	NFDP1277G3C★	900.00
Dual Supply 277 V	NFDP2277G3C★	1650.00
Filler Plate	SLC4CSF8	27.00

♦ Extends C-Bus power to Clipsal devices.
★ DE-8 Discount.

Powerlink Network Accessories

Table 5.55: Powerlink Network Accessories

Description	Catalog No.	$ Price
RS232/485 Converter	6382RS485G3KIT	526.50

Table 5.56: Powerlink Remote Modem Support▼

Description	Catalog No.	$ Price
Modem Kit (for G3 Controllers)	6382G3MODEM	876.00

▼ Requires 2000 and 3000 controller and either Analog or Ethernet modem connection to each master panel.

G3 NF Panelboards 240 V and 480 Y/277 V Factory Assembled Systems

Maximum Voltage 480 Y/277 Vac

Table 5.57: Powerlink G3 System Price

List System Type	30 ckt Interior		42 ckt Interior		54 ckt Interior	
	12 ckt bus	24 ckt bus	18 ckt bus	36 ckt bus	21 ckt bus	42 ckt bus
Slave Panel	1650.00	3450.00	2025.00	4200.00	2370.00	4890.00
NF500G3	6753.00	8553.00	7128.00	9303.00	7473.00	10143.00
NF1000G3★	10728.00	12528.00	11103.00	13278.00	11448.00	14118.00
NF2000G3	17298.00	19098.00	17673.00	19848.00	18018.00	20688.00
NF3000G3	21072.00	22872.00	21447.00	23622.00	21792.00	24462.00

NOTE: *Powerlink EM option BCPM list price adder.*

Table 5.58: Panelboard Base Price (including solid neutral)

Mains Rating	Main Lugs		Main Circuit Breaker (Circuit Breaker Interrupting Rating—6-2 through 6-8)▲▼											
			Standard IC			HIC			Extra HIC			I-Limiter™		
	2-pole	3-pole	Circuit Bkr.	2-pole	3-pole	Circuit Bkr.	2-pole	3-pole	Circuit Bkr.	2-pole	3-pole	Circuit Bkr.	2-pole	3-pole
100 A	—	—	ED■	2454.00	2823.00	EG■	3150.00	3624.00	HJ	4872.00	5397.00	FI	6375.00	7326.00
125 A	1269.00	1458.00	ED■	5058.00	5643.00	EG■	6486.00	7464.00	—	—	—	—	—	—
150 A	—	—	HD	4905.00	5430.00	HG	6072.00	6597.00	HJ	6105.00	6630.00	—	—	—
225 A	—	—	JD	6180.00	6570.00	JG	7605.00	8100.00	JJ	9930.00	10995.00	KI	10899.00	12528.00
250 A	1503.00	1728.00	JD	6750.00	7710.00	JG	8985.00	9270.00	JJ	10785.00	12675.00	KI	13731.00	15783.00
400 A	1989.00	2286.00	LA	7995.00	9189.00	LH	11568.00	13296.00	LC	12759.00	14664.00	LI	14025.00	16119.00
600 A♦	3549.00	3933.00	—	—	—	—	—	—	LC	14331.00	16326.00	LI	20460.00	23517.00
800 A♦	5325.00	5850.00	—	—	—	—	—	—	—	—	—	—	—	—

▲ HL and JL frame circuit breakers are also available as main circuit breakers.
■ Backfed Main Circuit Breaker—54 circuit only.
♦ Copper Bus Only.
★ For N2 protocol, add **$3819.**
▼ Contact your nearest Square D/Schneider Electric sales office for MICROLOGIC™ trip main circuit breakers

Table 5.59: Branch Circuit Breaker – Price Per Circuit Breaker

Powerlink G3—ECB Bolt-On 65 kA AIR@240 Vac, 14 kA AIR@480 Y/277					Standard Breakers—EDB Bolt-On 18 kA AIR 1-pole, 25 kA AIR 2 & 3-pole @ 240 V, 18 kA AIR@480 Y/277					Standard Breakers HIC—EGB Bolt-On 65 kA AIR@240 Vac, 35 kA AIR@480 Y/277					Standard Breakers Extra HIC—EJB Bolt-On 100 kA AIR@240 Vac, 65 kA AIR@480 Y/277				
Voltage	Ampere Rating	1-pole	2-pole	3-pole	Voltage	Ampere Rating	1-pole	2-pole	3-pole	Voltage	Ampere Rating	1-pole	2-pole	3-pole	Voltage	Ampere Rating	1-pole	2-pole	3-pole
240 Vac	15–20	438.	1215.	1929.	480Y/277 Vac	15–60	288.	663.	1122.	480Y/277 Vac	15–60	486.	1119.	1896.	480Y/277 Vac	15–60	777.	1767.	3036.
	30	438.	1215.	1929.		70	513.	1308.	1569.		70	867.	2211.	2565.		70	1386.	3540.	4245.
480Y/277 Vac	15–20	438.	1215.	1929.		80–100	—	1308.	1569.		80–100	—	2211.	2655.		80–100	—	3540.	4245.
	30	438.	1215.	—		110–125	—	3825.	4845.		110–125	—	6171.	7131.		110–125	—	7950.	9450.
Space Only		63.	126.	189.		Space Only	63.	126.	189.		Space Only	63.	126.	189.		Space Only	63.	126.	189.

Note: All EC, ED, EG and EJ branch circuit breakers are UL Listed as HACR type.

Sub-Feed Circuit Breaker

- Available on 1Ø or 3Ø, 125–800 A main lugs or 125–600 A main circuit breaker interiors
- One sub-feed JD, JG, JJ or JL circuit breaker per 250 A panelboard
- Two sub-feed JD, JG, JJ or JL circuit breakers per 400 A panelboard△

△ LC and JJ may not be combined.

Table 5.60: Sub-Feed Circuit Breaker (150–400 A)

No. of Poles	JD	JG	JJ□	JL	LA	LH	LC□	Space
2	2265.00	3165.00	3844.50	4230.00	2985.00	4150.50	6475.50	619.50
3	2527.50	3825.00	4665.00	5296.50	3687.00	4882.50	7617.00	619.50

□ JJ and LC sub-feed circuit breakers cannot be used together.

Table 5.61: Sub-Feed Breaker Cabinet Data

Max. No. of Branch Spaces (Does not include sub-feed breaker spaces)	Box Height (20" W x 5.75" D)						
	250 A		400 A LA/LH		600 A		800 A
	Main Lugs	Main Circuit Breaker	Main Lugs	Main Circuit Breaker	Main Lugs▽	Main Circuit Breaker ☆	Main Lugs◒
30	56	68	68	80	68	80◊	68
42	62	74	74	86	74	86◊	74
54	68	80	80	92	80	92◊	80

◊ Dimensions also for 400 A LC/LI main circuit breaker panels.
☆ 600 A main lug panelboards require an 8" deep, 26" wide box.
▽ 600 A main lug panelboards require an 8.75" deep box.
◒ 800 A main lug panelboards require an 8.75" deep, 26" wide box.

To obtain pricing for the following Special Features please refer to the Supplemental Digest.

- PowerLogic™ metering
- Customer equipment space
- Increased box depth
- Box extensions top, bottom and side
- Drip hoods
- Non-standard paint
- NEMA 1 gasketed
- NEMA 4 Stainless steel enclosure
- NEMA 4X Fiberglass enclosure (NQOD and NF)
- Stainless steel trim front (NQOD, NF and I-LINE)
- Padlockable hasp
- Special locks (Corbin, Yale, Best)
- Equal height boxes
- Common trip to cover two equal height boxes
- Panelboard skirthides conduits feeding a panelboard
- Panelboard wireway for terminating conduit in wireway endwall
- Panelboard interiors and special fronts to fit existing boxes

Powerlink Energy Management (EM) Lighting Control System

The Powerlink Energy Management (EM) Lighting Control System incorporates the same features found in the Powerlink G3 3000 level system, in addition to integral branch circuit and optional main metering for energy monitoring and verification of the lighting system. Integral metering is accomplished using the PowerLogic™ Branch Circuit Power Meter (BCPM), which is a highly accurate, full-featured multi-branch circuit power meter that provides unrivalled low-current monitoring.

The Powerlink G3 system reduces electrical energy consumption associated with lighting and other loads by automatically switching loads off during non-occupied periods. The Powerlink G3 system is often ideal for reducing th epeak demand by switching unnecessary lights off in response to an automated response signal or when high time-of-day energy tariffs occur.

Features

- Integral individual and optional mains metering to provide utmost flexibility in assurng a sustainable metering and verification program
- Monitors current, voltage, energy consumption, demand, and power factor for complete energy profiling
- Accumulated metering information transmitted via Modbus communications interface
- Data updates occurring within seconds to provide timely preventative maintenance information
- Optional EGX web interface for storing and reporting data via standard web browser (suggested for applications without Energy Management System [EMS] software)
- Alarm indication when parameters approach user-configured thresholds
- 16 hard-wired inputs available for connection to devices with physical dry-contacts
- 64 communication inputs available for network connection
- 16 independent time schedules, each can be configured into 24 distinct periods
- 7-day repeating clock with changeable automatic daylight savings time
- Automatic sunrise/sunset tracking with offsets
- 32 special event periods
- 32 remote sources for sharing input status, time schedules, or zone status between controllers
- Full custom logic capabilities, including full Boolean functions and synchronization services
- RS232 and RS485
- Serial communications using Modbus ASCII/RTU, BACnet MS/TP and DMX512 protocols (metering Modbus only)
- Ethernet 10BaseT communications using Modbus TCP and BACnet/IP protocols

Table 5.62:

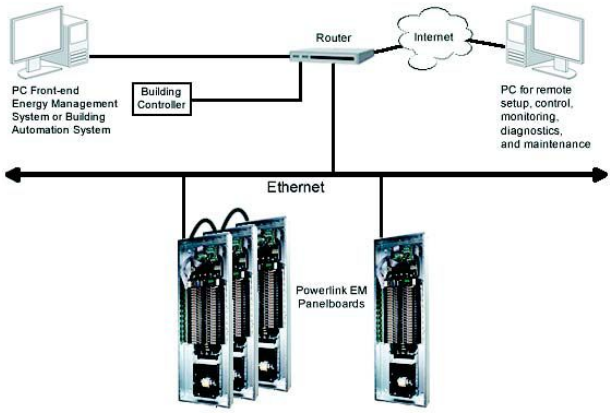
Characteristics	
Operating Temperature	-5° to 40°C (23° to 104°F) (95%RH, non-condensing)
Storage Temperature	-20° to 85°C (-4° to 185°F) (<95%RH, non-condensing)

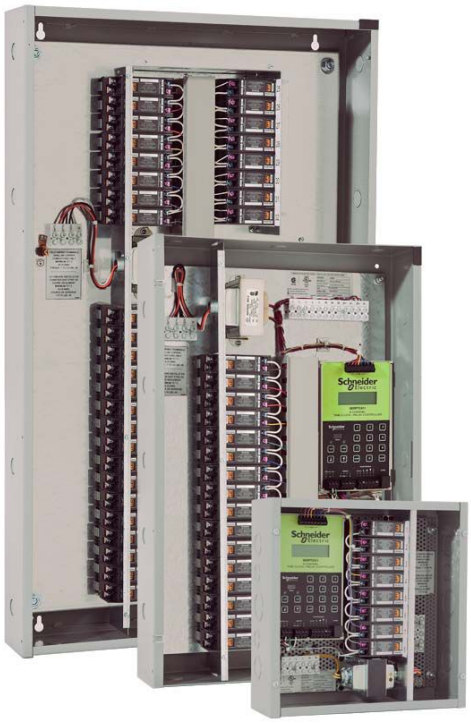
Regulatory/Standards Compliance

- UL Listed 916, Energy Management Equip
- FCC Part 15, Class A
- NEC Class 1 and Class 2 Control Circuits
- ESD Immunity: IEC 1000, level 4
- RF Susceptibility: IEC 1000, level 3
- Electrical Fast Transient Susceptibility: IEC 1000, level 3
- Electrical Surge Susceptibility: IEC 1000, level 4 (power line)
- Electrical Fast Transient Susceptibility: IEC 1000, level 3 (interconnection lines)

BCPM Specifications	
General	
Control Power	90–277 Vac
Frequency	50/60 Hz
Sampling Frequency	2560 Hz
Update Rate	1.6 seconds per panelboard
Overload Capability	10 kAIC
Ribbon Cable Support	Up to 20 ft.
Operating Temperature	0° to 60°C (32°C to 122°F) (<95%RH, non-condensing)
Storage Temperature	-40° to 70°C (-40° to 158°F)
Accurancy	
Current Monitoring	0.25 A to 100A: 3% of reading from 0.25 A to 2 A; 2% of reading from 2 A to 100 A
Auxiliary Inputs	2% of reading from 1% to 10% of rated current; 1% of reading from 10% to 100% of rated current (0 to 0.333 Vac)
Voltage Input	90–277 Vac; 1% of reading from 90–277 L-N (models BCPMA and BCPMB only)
Power	4% of reading from 0.25 A to 2 A; 3% of reading 2 A to 100 A▲ (models BCPMA and BCPM only)
Network Communications	
Serial	Modbus™ RTU
Ethernet	TCP/IP

▲ Recommended for application where EMS software monitoring is not provided.





Relay Panels Family

Schneider Electric LPS Lighting Control Relay Panels offer a practical design for meeting energy codes requirements in smaller commercial spaces. Panels are available pre-assembled with 8, 16, or 32 relays. They consist of relays, time scheduler, panel controller, power supply, and NEMA 1 cabinet and cover.

Schneider Electric LPS Lighting Control Relay Panels offer a practical design for meeting energy codes requirements in smaller commercial spaces. Panels are available pre-assembled with 8, 16, or 32 relays. They consist of relays, time scheduler, panel controller, power supply, and NEMA 1 cabinet and cover.

LPS-Standalone Relay Panel

LPS reduces energy use by automatically shutting off lights in response to a scheduled time event from its built-in time controller or in response to an external control device, such as a keypad switch, occupancy sensor, or photocell. These panels are ideal for use in smaller commercial applications, such as small strip retail and office spaces, where a centralized building management system is not practical.

Features

- Stand-alone lighting control system meets ASHRAE90.1 and CA Title 24
- Individual heavy duty, mechanically latching, 20A relays
- Built-in time controller supports 8 independent zones
- Time retained during power outages for up to 30 days; nonvolatile program memory
- Two universal switch inputs
- Individual relay overrides can directly control each relay
- Easy to program interface
- 2-wire relay used for monitoring and control
- Manual operation lever with ON/OFF indicator built-in for easy maintenance
- Screw terminals on load and control sides
- UL 916 listed
- Full 365-day, 7-day repeating clock with event priorities
- Multi-group relay assignment
- Inegral power supply (120 / 277 / 347 Vac)
- Standard sizes: (LPS) 8, 16, 32; (LPB/LPL) 8, 16, 32, 48, or 64

LPB Additional Features

- Application controller with the BACnet protocol
- Heavy duty plug-in relays and electronic cards
- Movable protection plate between high and low voltage sections

LPL Additional Features

- Application controller with the LonWorks protocol

Available options include:

- Multi-voltage separator (120/277/347 VAC)

Software provides a graphic interface that is simple and intuitive, providing the following:

- System configuration, programming, and operation: Scheduler and Data logger

LPB-Bacnet Protocol

The Schneider Electric LPB Lighting Control Relay Panel with Native BACnet Protocol offers cost effective and code compliant lighting control. Panels are pre-packaged for ease of ordering and installation. Standard configurations are available with 8, 16, 32, 48, or 64 relays.

Relays come in a heavy duty, high intensity discharge (HID) version that carries up to 20A full load and are rated for over 120,000 mechanical operations. Heavy duty relays are recommended for high inrush loads or where higher short circuit current ratings are required.

LPBs are designed to operate on a BACnet network where control intelligence is provided through a BACnet building automation system. These panels are ideal for smaller commercial or retail spaces where a low cost way to achieve automatic shut-off is required. These simple to install and commission panels include full feature schedule control. Switch overrides and photocells are easily added for complete control.

LPL-LonWorks Protocol

The Schneider Electric LPL Lighting Control Relay Panel with LonWorks® Protocol offers cost effective and code compliant lighting control. The LPL is pre-packaged for ease of ordering and installation. Standard configurations are available with 8, 16, 32, or 64 relays.

Whether from a stand-alone system, a soft-wired networked panels system, or a fully programmable network system, the LPL offers engineers and facilities managers all the flexibility they need to meet their lighting control requirements. LPL software scheduling and event programming capabilities easily support all common sequences encountered in lighting control.

The LPL was developed using open LonWorks technology from the Echelon® Corporation. By adopting LonTalk® communication protocols and incorporating Neuron® microprocessors, the LPL panel complies with LonMark(tm) Interoperability Guidelines and is ready to interoperate in highly functional, flexible, and open building systems.

The Schneider Electric Lighting Control Relay Switches provide manual ON/OFF operation of lighting in zones. The switches are equipped with a switch based device using reversible polarity pulse technology. The switches are fully compatible with Lighting Control Relay Panels by Schneider Electric.

Key Switch (SERPKWS)

- Wall mountable to any standard wall box
- Key operated (ON—turn right; OFF—turn left)
- Operates up to 4 relays per switch
- 6 switches per relay
- 3 Amp, 24 Vdc, Reversible polarity Impulse

Rocker Switch (SERPRWS)

- Wall mountable to any standard wall box (1-gang requires mounting bracket (SERPWSMB)
- LED ON/OFF indication
- Operates up to 8 relays per switch
- 6 LED switches per relay
- Optional filler plate (SERPWSFP)
- 3 Amp, 24 Vdc, Reversible polarity Impulse

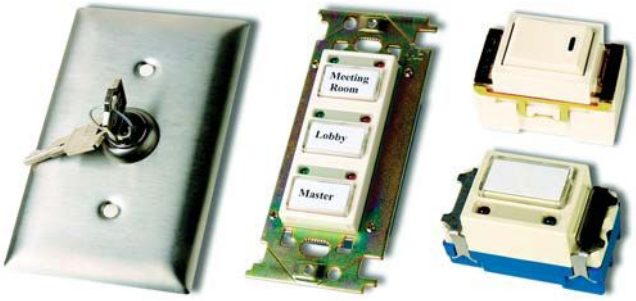
Push Button Switch (SERPWS) (Individual switch)

- Wall mountable to any standard wall box (1-gang requires mounting bracket SERPWSMB; 3-gang comes ready to mount)
- Switch input from common terminal
- LED ON/OFF indication
- Clear plastic labeling cap
- Operates up to 4 relays per switch
- 6 LED switches per relay
- Optional filler plate (SERPWSFP) may be required
- 1.5 Amp, 24 Vdc, Reversible polarity Impulse

Push Button Switch (SERPWS) (Assembled switch)

- Factory assembled
- Includes mounting bracket, switch(es), cover plate
- LED ON/OFF indication
- Clear plastic labeling cap
- Operates up to 4 relays per switch
- 6 LED switches per relay

NOTE: *Refer to 1290HO1101 Relay Switches handout for cover plate dimension*



Relay Switches
SERPKWS, SERPWS, SERPRWS, SERPWS

Table 5.63: Relay Panels, Switches and Plates

Cat. No.	Description	Price
SERP8NHS	SE SERIES RELAY PANEL 8 NON-HID RELAYS	1556.13
SERP16NHS	SE SERIES RELAY PANEL 16 NON-HID RELAYS	3334.58
SERP32NHS	SE SERIES RELAY PANEL 32 NON-HID RELAYS	6545.67
SERP8HS	SE SERIES RELAY PANEL 8 HID RELAYS	2726.58
SERP16HS	SE SERIES RELAY PANEL 16 HID RELAYS	4829.59
SERP32HS	SE SERIES RELAY PANEL 32 HID RELAYS	8385.48
SERPB8HS	SE SERIES BACnet RELAY PANEL 8 HID RELAYS	4559.36
SERPB16HS	SE SERIES BACnet RELAY PANEL 16 HID RELAYS	5322.60
SERPB32HS	SE SERIES BACnet RELAY PANEL 32 HID RELAYS	9521.71
SERPB48HS	SE SERIES BACnet RELAY PANEL 48 HID RELAYS	13078.59
SERPB64HS	SE SERIES BACnet RELAY PANEL 64 HID RELAYS	16684.88
SERPL8HS	SE SERIES LonWorks RELAY PANEL 8 HID RELAYS	3555.23
SERPL16HS	SE SERIES LonWorks RELAY PANEL 16 HID RELAYS	4897.76
SERPL32HS	SE SERIES LonWorks RELAY PANEL 32 HID RELAYS	8785.62
SERPL48HS	SE SERIES LonWorks RELAY PANEL 48 HID RELAYS	11932.49
SERPL64HS	SE SERIES LonWorks RELAY PANEL 64 HID RELAYS	15800.60
SERPFLC16	SE SERIES FLUSH COVER FOR 16 RELAY PANELS	239.00
SERPFLC32	SE SERIES FLUSH COVER FOR 32 RELAY PANELS	325.00
SERPFLC48	SE SERIES FLUSH COVER FOR 48 AND 64 RELAY PANELS	415.00
SERPR1	SE SERIES 1 POLE 20A HID RELAY 120–347 V	255.95
SERPR2	SE SERIES 2 POLE 20A HID RELAY 208–480 V	389.00
SERPTC411	SE SERIES RELAY PANEL TIME CLOCK CONTROLLER MODULE	1037.42
SERPRC401	SE SERIES RELAY PANEL SEQUENCER MODULE	1025.08
SERPBC601	SE SERIES RELAY PANEL BACnet Controller	1051.16
SERPTC811	SE SERIES RELAY PANEL TIME CLOCK CONTROLLER LonWorks MODULE	730.00
SERPLIC	SE SERIES RELAY PANEL INPUT CONTROLLER LonWorks MODULE	645.00
SERPLOC	SE SERIES RELAY PANEL OUTPUT CONTROLLER LonWorks MODULE	957.00
SERPLUSB	SE SERIES FT—10 NETWORK INTERFACE USB	950.00
SERPLS	SE SERIES Lon SOFTWARE	1050.00
SERPPBWS	SE SERIES RELAY PANEL WALL SWITCH WITH BRACKET	85.90
SERPKWS	SE SERIES RELAY PANEL LOW VOLTAGE KEY OPERATED SWITCH	85.57
SERPRWS	SE SERIES RELAY PANEL LOW VOLTAGE ROCKER WALL SWITCH	50.40
SERPWSMB	SE SERIES RELAY PANEL WALL SWITCH MOUNTING BRACKET	9.69
SERPWS1G1B	SE SERIES RELAY PANEL WALL SWITCH 1 GANG 1 BUTTON	95.57
SERPWS1G2B	SE SERIES RELAY PANEL WALL SWITCH 1 GANG 2 BUTTON	149.88
SERPWS1G3B	SE SERIES RELAY PANEL WALL SWITCH 1 GANG 3 BUTTON	194.29
SERPWS2G4B	SE SERIES RELAY PANEL WALL SWITCH 2 GANG 4 BUTTON	259.14
SERPWS2G6B	SE SERIES RELAY PANEL WALL SWITCH 2 GANG 6 BUTTON	367.97
SERPWS3G9B	SE SERIES RELAY PANEL WALL SWITCH 3 GANG 9 BUTTON	531.64
SERPWS3G12B	SE SERIES RELAY PANEL WALL SWITCH 4 GANG 12 BUTTON	695.31
SERPWS5G15B	SE SERIES RELAY PANEL WALL SWITCH 5 GANG 15 BUTTON	859.42
SERPWS6G18B	SE SERIES RELAY PANEL WALL SWITCH 6 GANG 18 BUTTON	1003.53
SERPWSFP	SE SERIES RELAY PANEL WALL SWITCH FILER PLATE	8.07
SERPWP1G1B	SE SERIES RELAY PANEL WALL PLATE 1 GANG 1 BUTTON	30.00
SERPWP1G2B	SE SERIES RELAY PANEL WALL PLATE 1 GANG 2 BUTTON	30.00
SERPWP1G3B	SE SERIES RELAY PANEL WALL PLATE 1 GANG 3 BUTTON	30.00
SERPWP2G4B	SE SERIES RELAY PANEL WALL PLATE 2 GANG 4 BUTTON	45.00
SERPWP2G6B	SE SERIES RELAY PANEL WALL PLATE 2 GANG 6 BUTTON	45.00
SERPWP3G9B	SE SERIES RELAY PANEL WALL PLATE 3 GANG 9 BUTTON	60.00
SERPWP3G12B	SE SERIES RELAY PANEL WALL PLATE 4 GANG 12 BUTTON	70.00
SERPWP5G15B	SE SERIES RELAY PANEL WALL PLATE 5 GANG 15 BUTTON	80.00
SERPWP6G18B	SE SERIES RELAY PANEL WALL GANG 6 GANG 18 BUTTON	90.00

Cassia System Components

The Cassia energy management system (EMS) from Schneider Electric is a revolutionary wireless in-room solution that can have a dramatic impact on all key aspects contributing to your bottom line, from delighting your guests and reducing your carbon footprint, to enjoying a rapid return on investment and helping to maximize energy savings.

Thermostat

The Cassia thermostat controls heating and cooling equipment in guest rooms. Each thermostat uses two independent Zigbee radios for the local Room Area Network (RAN) within the room and the Hotel Area Network (HAN).

Motion Sensor (PIR)

The Cassia wireless motion sensor uses a Passive Infrared (PIR) sensor to detect heat patterns in the room. Motion will be signaled to the thermostat if the heat pattern changes.

Door Sensor

The Cassia wireless door sensor consists of a base and magnet. It sends a signal to the RAN indicating when the door is opened or closed.

Lighting Control

The Cassia Lighting Control System, including switches (1000 W), dimmers (800 W), and plug modules (Leading Edge Dimmer and Relay types), uses ZigBee wireless technology that provides dimming and/or on/off functions.

Wall switches and dimmers are available in black, white, cream or light almond, with one and three button options.

Plug Modules

Leading Edge Dimmer and Relay Plug Modules are designed to work as part of a Cassia EMS network installation and can be controlled by other devices on a Cassia EMS network. The modules may be placed into any standard 120 V wall outlet.

Plug modules are available in white.

Group Coordinator (GC)

The Cassia EMS Group Coordinator is a Zigbee® wireless gateway that can support up to 75 thermostats and provides communication between a Room Area Network (RAN) Hotel Area Network (HAN) as well as a Property Management System (PMS).

Server

The EMS Server receives temperature, door events, motion events, and other data from the rooms. Data flows across the Ethernet network between the Thermostats, Group Coordinators and the EMS server.

Contact your Schneider Electric representative for more information about the Cassia Energy Management System.