

Sensors and Detectors - Clipsal by Schneider Electric

Sensors and Detectors

Add sensors and detectors to make an environment smarter and more efficient.

C-Bus sensors and detectors allow environmental elements like temperature, light level, occupancy and vacancy to be detected. In turn, altering the environment as required.

They utilise infrared, ultrasonic or a combination of both detection technologies. They can be retrofitted to an existing C-Bus installation, and programmed to control any output devices on a C-Bus network.



C-Bus 4-Zone Thermostat with Programmable Time Scheduling

Monitors environmental temperatures via a user-friendly interface. Users can manually adjust the temperature, set point, mode of operation and time schedules.



- 4 zones (plus the common zone), programmable C-Bus Thermostat
- Wall-mounted
- Dimensions 105mm x 149mm x 24mm
- Support for control of HVAC equipment via C-Bus or directly using onboard HVAC relays
- Onboard 7-day HVAC time scheduling (user programmable), manual fan speed control and Setback mode
- Draws 40mA from a C-Bus network
- Manually adjustable temperature set point, mode of operation (heating, cooling or ventilation) and time schedules

C-Bus Light Level Detectors

Used to measure and regulate lighting and achieve bank switching or continuous dimming. Powered from a C-Bus network and does not include Learn Enabled features.

- Regulates lighting in the range of 0-1500 lux
- Programmable target light level and margin on installation
- Can achieve bank switching or continuous dimming
- Available in outdoor weatherproof 56 Series Enclosure
- Units draw 15mA (Surface Mount) and 18mA (Weatherproof) from a C-Bus network
- Target light level and margin are adjustable from C-Bus (Surface Mount model only)



C-Bus Multi-Sensors

Combines a C-Bus PIR Occupancy Sensor, Light Level Sensor and an Infra-red Receiver.



- C-Bus Learn Enabled
- Flush mount, 360°, ceiling mount multi-sensor
- Combined PIR motion detector, light level sensor and IR receiver
- Capable of controlling up to 8 C-Bus scenes or 8 C-Bus group addresses
- Supports 'corridor linking' for commercial building applications
- Three LEDs indicate a range of actions from movement
- Light and PIR sensitivity set via adjustment screws
- Dual element detectors minimise false triggering
- An LED status indicator reports the state of the load controlling device
- Draws 18mA from a C-Bus network

C-Bus Occupancy Controllers and Detectors

A cost effective sensor control solution offering maximum detection, control and energy efficiency for commercial applications.

- Pre-programmed, self-contained, quick and easy to install
- Suitable for meeting rooms, stairwells, car parks, washrooms etc.
- Wide range of PIR, ultrasonic and PIR/ultrasonic (Dual Technology) wall and ceiling mount detectors, with 110°–360° detection ranges
- Available in 1- or 2-zone models - up to three motion detectors per zone
- The C-Bus Occupancy Controller unit provides power to the detectors
- Segregated LV and ELV compartments
- Onboard 16A relay(s)
- Tested and rated to switch multiple mains phases
- Occupancy controllers function with or without a C-Bus connection
- Multiple mounting options (keyhole or hanging)
- Highly flexible advanced programming options including corridor linking and multiple join modes for meeting rooms
- Auxiliary inputs for standard Clipsal Switch types (pushbutton or toggle-type switches)
- Onboard timers (1 minute - 4 hours) and relay fail-safe mode
- Remote override ON/OFF capability
- C-Bus supply voltage: 15–36V d.c. @ 25mA (does not provide power for C-Bus network)
- Detector supply voltage: 24V d.c. 280mA (140mA per zone)
- 2-zone dimmer model provides control outputs for DSI, Dali (broadcast) or 010V analogue signals



C-Bus Passive Infrared (PIR) Motion Detectors - Indoor Flush Mount

Detect movement indoors with this perfectly suited product.



- Flush mount, 360°, ceiling mount PIR motion detector
- Suitable for indoor use
- Features a Sunset Switch program
- Coverage range of 6m x 6m
- Features a light threshold adjustment
- Programmable time delay range of 1 second to 18 hours
- Draws 18mA from a C-Bus network

C-Bus Passive Infrared (PIR) Motion Detectors - Indoor Surface Mount

Detect motion indoors with this Learn Enabled, PIR motion sensor.

- Coverage range of 6m x 6m and a field of view of 90°
- Features a light threshold adjustment
- Programmable time delay range of 1 second to 18 hours
- Features a Sunset Switch program
- Powered from C-Bus and requires 18mA at 15 - 36VDC for correct operation.





C-Bus Passive Infrared (PIR) Motion Detectors – Outdoor

Designed to detect outside movement

- 110° field of view and detection range extending 18 metres
- Features a light threshold adjustment
- Programmable time delay range of 1 second to 18 hours
- Features a Sunset Switch program
- Draws 18mA from a C-Bus network

C-Bus Digital Temperature Sensors

Accommodates digital temperature sensors that are capable of measuring temperature and reporting to a C-Bus network.

- 4-channel Digital Temperature Sensor Input Unit
- 1 Digital Temperature Sensor per input channel (empty channels are permitted)
- 3 temperature sensor types:
 - FLAT tip, 4.5mm (W) x 7mm (H) x 20mm (L)
 - TUBE tip, 6mm (dia.), 30mm (L)
 - POINT tip, 6mm (dia.), 12mm (L).
- Temperature sensor cable is 2-conductor, insulated and 2m in length
- Temperature sensors are powered by the Input Unit
- Maximum extension length is 25m per temperature sensor
- Temperature sensor tip material – 314 grade stainless steel
- Contains LED indicators for temperature sensor connection status
- Detects reverse connection, short or open circuit and failure of connected temperature sensors
- Measurement range from -40°C to 100°C
- Temperature measurement resolution of 0.1°C
- Temperature measurement accuracy:
 - -40°C to -10°C: $\pm 2^{\circ}\text{C}$
 - -10°C to 80°C: $\pm 0.5^{\circ}\text{C}$
 - 80°C to 100°C: $\pm 2^{\circ}\text{C}$
- Operating temperature range of 0°C to 65°C
- Configurable frequency of temperature broadcast on C-Bus
- Temperature offset feature within programming
- Operates on C-Bus Measurement or C-Bus HVAC applications
- Draws 18mA from a C-Bus network

