

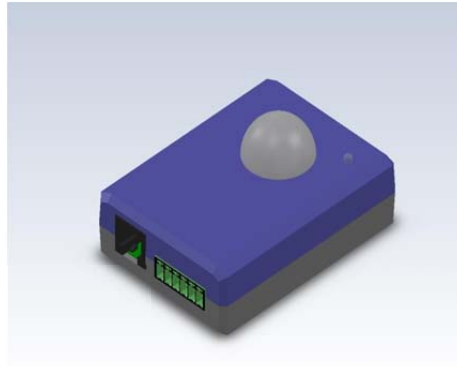
IBE-1200™ Intelligent Light Sensor

Solar Measuring Device for CS-Bus™ Shading and Lighting Controllers

*Dual Radiometric and
Photometric Sensing Device*

*Can trigger window-
covering motors when light
levels reach specified levels*

*Can trigger lighting
systems to when light
levels reach specified*



*Small Form Factor Device
can be Positioned Outward
Facing on an Inside Window*

Self-Powered from CS-Bus™

*CS-Bus™ Control System
Accessory*

Product Description

Description

The IBE-1200™ is a standalone, intelligent interface adapter that monitors photopic (visual) as well as longer IR wavelengths and automatically generates appropriate motor/shading as well as lighting control CS-Bus™ commands for daylight harvesting/energy conservation applications. When combined with CS-Bus™ shading system, the sensor measures lighting levels and automatically regulates the position of window covering products. When combined with CS-Bus™ lighting systems, the sensor similarly automatically adjusts light levels.

Operation

Typically for motor/shading application, one or more IBE-1200™ adapters are window mounted pointing outwards toward the open sky. For internal lighting applications, the device is typically mounted within the interior space. Once threshold levels and response settings have been programmed, the system automatically measures lighting levels and transmits appropriate commands as required.

Easy Setup and Configuration

Simply plug the IBE-1200™ into any Converging Systems' CS-Bus™ network up to 4000 feet from an intelligent lighting or motor controller and built-in Plug-n-Play functionality automatically generates appropriate CS-Bus™ commands depending upon observed illumination levels measured from a pair of on-board sensors and associated processing technology. Lighting thresholds as well as response time adjustments can be easily made using either the IBT-100™ (serial adapter) or the e-Node™ (Ethernet adapter). Lighting thresholds are useful for mapping climatic variables (sky cover) and response time adjustments reduce the probability of false triggers such as cloud movement or objects that temporarily obstruct the sensor's view.

Applications

The IBE-1200™ is an ideal product for hotels, office, homes for daylight harvesting and lighting/energy conservation.

Features

- CS-Bus™ control accessory
- Triggers CS-Bus™ clients based upon momentary climate conditions (sky)
- Dual radiometric and photometric sensors with adjustable thresholds
- Accurate Lux measurements (0 to 1000)
- Built-in AC ripple/flicker filter
- Preprogrammed lighting and motor settings
- Response time configurator
- Remote configuration available through e-Node™ and Pilot application software
- Can be located up to 4000 feet away from other CS-Bus™ controllers
- CS-Bus™ powered--no need for separate power

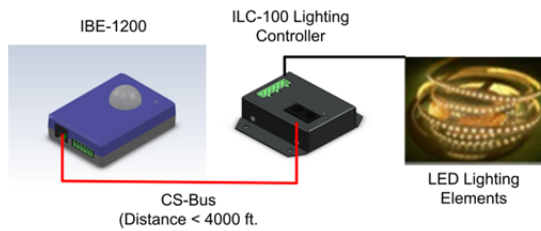
Specifications

Feature	Detail
Solar Measuring Device for CS-Bus Controllers	Measures photopic and IR wavelengths and generates CS-Bus commands for daylight harvesting/energy conservations applications..
Lighting Control Modality	Maps measured lighting levels to specific <i>lighting</i> control specific CS-Bus™ commands (factory default)
Motor Control Modality	Maps measured lighting levels to specific <i>motor</i> control specific CS-Bus™ commands (field selectable)
Dynamic Range (Lux)	Min 0.1 Max 40000
Network Bus Type	One RJ-25 for CS-Bus™ or RS-485 communication
Network Pin-outs	Pin 3 RS485-, Pin 4 RS485+, Pin 2 Ground
User Interface	Discovery Button (for network identification)

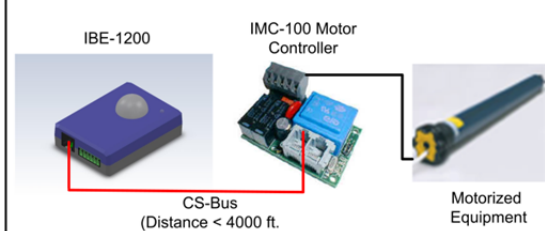
Feature	Detail
Software Compatibility	CS-Bus customized commands
Power Requirements	Self powered from DC voltage available on standard CS-Bus™ lines (as well as commonly available RS-485 bus lines)
Operating Conditions	For indoor use only, 32-130° (0-54°C) less than 90% RH, non condensing
Size	3.06" x 2.25" x 0.875" (77.72 mm x 57.10 mm x 22.23 mm)
Enclosure	Molded plastic enclosure
Weight	1.7 oz. (.05kg)
Manufacturing	Made in the USA

Wiring

CS-Bus Lighting Wiring Diagram

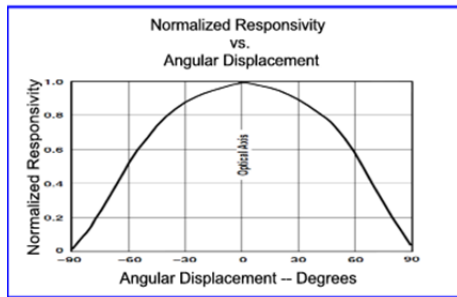


CS-Bus Motor Wiring Diagram



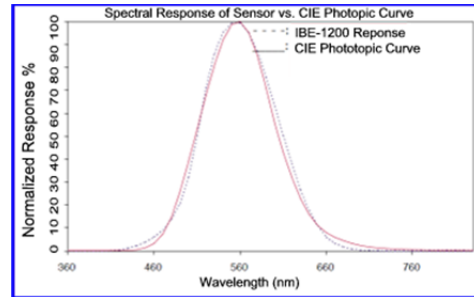
Placement /Response

Placement



The sensor is optimized for use pointed toward or within a 60 degree viewing range from source.

Spectral Response



The sensor detects primarily visible light and filters out IR and UV.

Applications

The IBE-1200™ Intelligent Bus Encoder is ideal for a variety of applications. It has been optimized to work with compatible CS-Bus controllers (motor and lighting) to regulate these devices depending upon sky conditions or ambient lighting levels. When sky is overcast, the shades are raised, for example. When clear and bright, the shades are adjusted or closed. Decorative LED lighting can similarly be adjusted automatically based on ambient lighting levels. Your application may be easily adapted from our core technology. Contact us for more information.

- Daylight harvesting-automatic shade adjustment based upon sky conditions
- Automatic lighting control--LEDs can be auto-adjusted based upon other lighting levels
- Remote Solar penetration/absorption monitoring
- Necessary enabler for specialized LEEDs energy saving initiatives
- Special effect controller—LED lighting systems