Lighting Control that Fits Your Building Automation System
**Modbus**
Modbus consists of a messaging structure designed to establish client-server communications between a wide range of intelligent devices. Most of our systems can use this common building automation protocol.

**BACnet**
BACnet is a nonproprietary, open protocol communications standard. It can be applied to practically any type of system found in buildings today.

**LONworks**
LONworks-compatible devices communicate with each other through what is known as a Standard Network Variable Type, or SNVT. For an SNVT to function, both the sending and the receiving devices must have detailed knowledge of what the SNVT structure is.

**CANbus**
CANbus is a Controller Area Network bus, a rugged, digital serial bus originally designed for automotive and industrial environments. It is now used in a wide range of applications, including those for aircraft and aerospace as well as factory and building automation.

**HTML**
HyperText Markup Language is the standard language used to structure Web pages. HTML is used to conform to the HTTP communication protocol necessary for displaying information over the Internet.

**Full-2Way**
The Full-2Way bus is a low-voltage, two-wire, topology-free and polarity-neutral system developed by Panasonic. This affords architects, engineers and specifiers design flexibility. It is easy to install, easy to expand and ideal for both new construction and retrofit applications.

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**Your Missing**

<table>
<thead>
<tr>
<th>Communication Protocol</th>
<th>Nebula</th>
<th>LPB</th>
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<tbody>
<tr>
<td><strong>Modbus RTU</strong></td>
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<tr>
<td><strong>Modbus TCP</strong></td>
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<td><strong>BACnet MSTP</strong></td>
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<td><strong>BACnet TCP</strong></td>
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<td><strong>LONworks</strong></td>
<td>Option</td>
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<tr>
<td><strong>Full-2Way</strong></td>
<td>Standard</td>
<td>Standard</td>
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<td><strong>CANbus (Switches)</strong></td>
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<td><strong>HTML (Web Pages)</strong></td>
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<td><strong>Maximum Zones</strong></td>
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Your building automation system is a computerized, intelligent network of electronic devices designed to manage your entire building. There are many intricate pieces to this networking puzzle all coming together to form one cohesive unit. Your mechanical, electrical and lighting systems all must be able to provide the necessary capabilities while communicating in the same language. It can be challenging to find all the right pieces.

When it comes to lighting control, PLC is the missing piece to your building automation puzzle. We offer lighting control systems with the BAS capabilities you require while operating within the protocol you specify.

**Lighting Control for Any Application**
PLC has developed a wide range of lighting control systems ready to handle almost any lighting application. With input/output options ranging from as few as 8 to as many as 255, we have a lighting control solution that’s sure to be a perfect fit.
Control the Capabilities You Need
Every PLC lighting control system gives you the ability to incorporate all the capabilities you are looking for, including LED dimming and remote switching.

Communicate with Your BAS
Each of our systems has been designed for easy communication on networks using BACnet, Modbus, LONworks and even CANbus. It's easy to incorporate one of our systems into your building automation system.

The Expertise to Put It All Together
Simply select a lighting control system that suits your building’s lighting needs. Then choose the capabilities you’d like your building automation system to control. Our software engineering team will combine this with the proper protocol that is a perfect fit to your building automation system. Your puzzle is solved.

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<thead>
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<th>LPE</th>
<th>LPA</th>
<th>BantamX</th>
<th>LCM</th>
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CES Sensor Output Monitoring
The status of every sensor can be viewed in foot-candles as a voltage, current or calibrated value.

Time Clock-Scheduled Events
This configurable capability enables an output relay to be controlled by the ON/OFF times of the internal time clock schedule.

Photo- and Clock-Scheduled Events
This capability allows a photo sensor to turn ON the exterior lights and allows the time clock to shut OFF the lights at a later time.

Photo Control & Daylight Harvesting
Maximize energy conservation by using the capabilities of photo sensors and controllers to shut off internal lighting when the ambient light levels reach a specific point.

Remote Switch Status or Control
Allows the use of a manual switch for controlling a relay or zone output. This remote switch capability can be combined with other control sources such as photo and time clocks, which gives greater lighting control flexibility.

Outputs Override Control
Most lighting applications that involve public safety should have override controls built into the lighting control. This feature allows the output relays to be forced ON or OFF regardless of the state of the system controller.

Temperature and Pressure Control
Control events based on readings from temperature or pressure sensors.

Analog 0-10 and 4-20mA Monitoring
Inputs are flexible to monitor 0-10, 1-10, 0-5, 1-5 Volt signals for use in applications where the sensor is up to 500 feet from the control system. For locations up to 4,000 feet away, you can use our 4-20mA sensor.
BRIGHT IDEAS

PLC Lighting Control Systems

Nebula
120VAC
277VAC
Code Compliance
Relays
Full-2Way Network

LPB
120VAC
277VAC
Code Compliance
Relays
480VAC

LPE
120VAC
277VAC
Code Compliance
Relays
480VAC

LPA
120VAC
277VAC
Code Compliance
Relays
480VAC

BantamX
120VAC
277VAC
Code Compliance
Relays

LCM
120VAC
277VAC
Code Compliance
Relays
Contactors
30A 600VAC

PLC Buildings
Lighting Control Systems

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306 Protocols Rev1