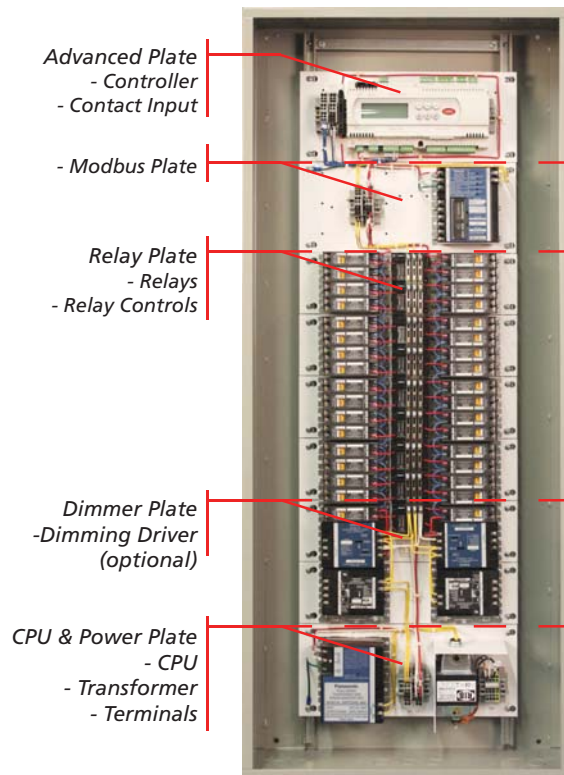


LPA

ADVANCED MULTIPLEX TRANSMISSION Full 2-WAY Remote Lighting Control System

APPLICATIONS

- Airports
- Office Bldgs (High Rise)
- Schools
- Sports Facilities



PROJECT	
LOCATION	

FEATURES

- 16 LPA programmed zones can be assigned to the Full-2Way network
- On / Off control of lighting and other electrical loads using mechanically latching relays
- Controls Individual, Dimmer, Group and Pattern functions
- EEPROM memory storage of Groups and Patterns eliminates need for battery backup
- Automatic Daylight Savings Time function
- IR Address setting unit for switches, relays, Patterns and Groups
- Time clock configurable as 7-day with two ON/OFF events per day; 7-day with optional timed override and sweep sequence
- Accumulated run time logging
- Input photo sensor time delay prevents intermittent or false switching
- Programmable hold-on timer prevents high intensity discharge lighting from short-cycling
- System can use one Networked Daylight Sensor per zone or up to 3 PLCsensors line of Indoor, Outdoor, Atrium and Skylight sensors
- Dimmer has programmable level and fade time settings
- Communication using RS485 Modbus and Ethernet BACnet
- Optional Touchscreen Display and Webserver
- Optional Web versions allow for improved GUI, network expansion and enhanced EMS integration
- Compliant with California Title 24
- 2-year warranty

DESCRIPTION

The LPA Series is the "Advanced" version of PLC-Multipoint's multiplex transmission Full-2Way remote lighting control system. It uses just two 24 V signal wires for all of the switches on a network, and controls lighting using mechanically latching relays. This reduces the number of wires needed compared to conventional control wiring.

The system is cost-effective and easily-configurable with programming and accessories. Centralized monitoring and control of lighting can handle up to 256 circuits per system, and it is logically capable of turning up to 127 groups of lights on and off in an entire section of any application area. Up to 72 control patterns can be programmed to match work schedules or habits, allowing for maximum occupant satisfaction while achieving energy and operating cost savings. The LPA is easily configurable

to match a daily schedule for lights to be automatically turned on and off. Passive infrared motion sensor control is also offered to turn on and off lighting depending on occupancy of a monitored building space. For additional energy savings, indoor daylight sensors are available which respond to the brightness of the environment.

In addition to the capabilities above, this system offers added energy saving possibilities by adding optional components such as; dimmer controls; and PLCsensors line of CES sensors for indoor, outdoor, atrium and skylight applications. Programmed operational functions such as: Photo Control, Sweep, Time Scheduling and Override. Communication protocols include RS485 Modbus and Ethernet BACnet. Optional zones of control can be configured.

TECHNICAL DATA - LPA SERIES

Input Voltage: 120 VAC, 277 VAC or 480 VAC
Output Zones: 20 Amp Relay is mechanically latching; Rated up to 277 VAC at 20 A. (8 - 256 points)
Relays Electrical Inputs: Low Voltage: ± 24 VDC reversible polarity (± 24 VAC half-wave), Class II
Current: 350 mA
Relay Electrical Outputs: Line Voltage:
 • 20 A 300 VAC (General Use)
 • 2400 W 120 VAC (Tungsten)
 • 20 A 300 VAC (Ballast)
 • 14,000 amps short circuit interrupting current
CPU Signal Voltage: ± 24 V
Signal Methods: Cyclic time sharing multiplex transmission with cut-in signal method
Signal Wires: Two wires with no polarity
Signal Transmission Distance: 1,600 ft max. with 18 awg wire
Extension of Transmission Distance: Max. 9,800 ft, Total of 29,500 ft (with use of 5 amplifiers)
Power Failure Backup: Flash Memory for Groups/Patterns
Approvals: Compliant with California Title 24

Advanced Processor: 16 zones using Modbus to communicate on Full-2Way network
Time Switch: Automatic Daylight Savings Time Function
Control Modes: 13 combinations of Photo Control, Time Schedule, Sweep and Switch
Photo Control Function: SETUP: Photo set point control
 AUTO: Photo sensor control with timers (ON at low, OFF at high set points)
Input Delay: Photo sensor: Programmable with 60-seconds and setup mode override defaults
Hold-ON-Timer: Photo sensor: Programmable with 30-minutes and setup mode override defaults
Photo Sensors: Indoor, Outdoor, Atrium and Skylight Sensors (Input to Controller)
Dimmer Signal Voltage: 0-10 VDC
Dimmer Signal Current: Max. 100 mA to Dimming Ballast
Address Setting: Infrared Wireless and Dip Switch

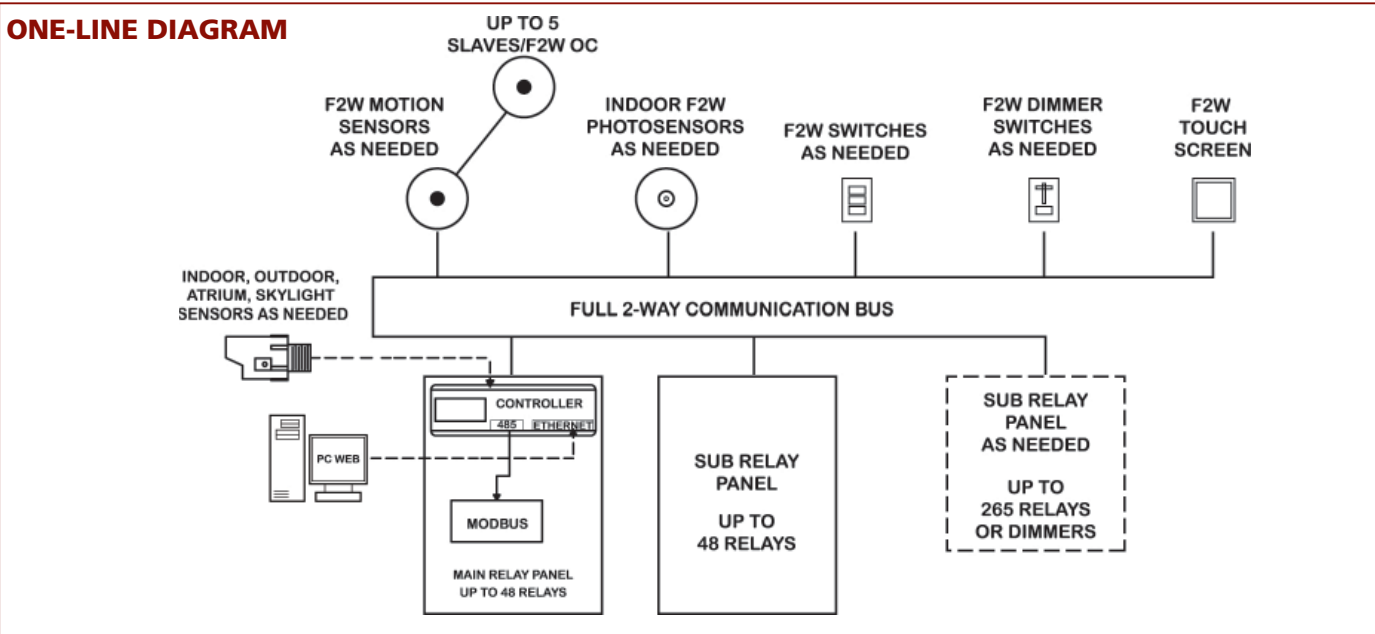
Communication Protocols: RS485 Modbus and Ethernet BACnet
Operator Interface: 4 Line LCD and Optional Web Server

Enclosure Dimensions: NEMA-1 Surface Mount Enclosure
 24"H x 20"W x 6"D
 36"H x 20"W x 6"D
 48"H x 20"W x 6"D

Temperature Range: 32° to 140°F (0° to 40°C)

Input Option Devices: Panasonic Daylight Sensors, Motion Detectors, Switches and Touchscreen display

ONE-LINE DIAGRAM



ORDERING INFORMATION

LPA - R1 OR R2 - DI - DF - V - -

|
Switching Circuits | **Dimming Circuits** | **Voltage** | **Quote number** | **Panel Number**
 (Incandescent) | (Fluorescent) | | | (Starting at #01)

ACCESSORIES See LP-Series Accessories Sheet (Listed Separately)