



## The PP820/860 Series High-Current LED Lighting Controllers

### Provides the most powerful LED pulsing

- Pulsing up to 160A per unit
- LEDs can be used instead of xenon strobes
- Very Accurate Timing
- Designed for New Generation LEDs.

The PP820/860 Series LED Lighting Controllers provide very fast, accurate, large-current pulses for high-end applications. With new generation LEDs, the PP820/860 Series can provide high-intensity pulses which can exceed the brightness of xenon strobes.

**Three modes of operation** are provided independently for each channel:

- **Continuous** – output is a continuous current, with configurable intensity;
- **Pulsed** – output is pulsed once per trigger, with configurable delay, pulse width and intensity;
- **Switched** – output is a continuous current, turned on and off by a digital input.

The PP820 series is configured using the Ethernet connection to a network. The PP860 series is configured using the RS232 connection to a PC. The configurations are saved in non-volatile memory so that the controller will resume operation after a power cycle.

Gardasoft offers a wide choice of LED controllers, suitable for a broad range of lighting solutions.

The PP range of controllers improves LED lighting applications with the following benefits:

- Very fast bright strobing for freezing motion
- Very repeatable lighting intensity
- Driving the LEDs with a constant current, rather than voltage
- The ability to pulse the output at a higher current to achieve a higher output intensity
- Pulsing turns the LEDs off when not in use, increasing their MTBF rates, reducing downtime.

## The PP820 Series configuration/control

### Internal web server

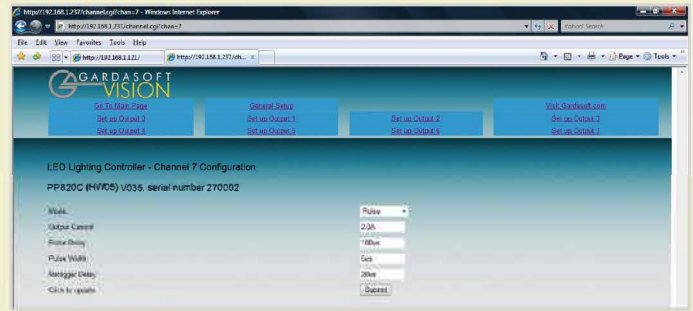
The PP820 series LED Lighting controllers has all the features of Gardasoft's LED Lighting controllers with the addition of an Ethernet connection.

The PP820 acts as an internal web server and can be controlled by image processing software on a remote PC.

### Configuration options

Firstly, a Web Browser can be used to access its web pages allowing status to be viewed and parameters to be changed.

Secondly, simple string commands can be sent from an application program using TCP/IP or UDP. The Gardasoft Vision website [www.gardasoft.com](http://www.gardasoft.com) has a free download, which shows how the PP820 series can be controlled from a PC using the customer's application.



### Ethernet features

The PP820 series needs an IP address. It can be configured to work using a specific IP address or using a Dynamic Host Configuration Protocol (DHCP) server, which supplies a temporary IP address.

### The PP820/860 ranges

These controllers offer proven stable solutions for today's lighting needs, providing accurate pulse width control and high speeds to enable overdriving of the LEDs.

## PP820/860 SERIES SPECIFICATIONS

SPECIFICATIONS:	PP820 Series	PP860 Series
Configuration/Control	Ethernet, using TCP/IP or UDP. Configured using a web browser, or from the user's application software.	RS232 commands from a terminal, or from the user's application software.
Output channels	8 independent, constant-current output channels	
Output currents (options)	PP820/860: Controllable in steps of approx 100mA; up to 20A pulsed, or 2A continuous. PP820C/860C: Controllable in steps of approx 5mA; up to 20A pulsed, or 2A continuous. PP821/861: Controllable in steps of approx 10mA; up to 2A pulsed, or 2A continuous. PP821C/861C: Controllable in steps of approx 0.5mA; up to 2A pulsed, or 2A continuous. PP822/862: Controllable in steps of approx 25mA; up to 5A pulsed, or 2A continuous. PP822C/862C: Controllable in steps of approx 1.5mA; up to 5A pulsed, or 2A continuous.	
Trigger inputs	8 opto-isolated digital inputs	
Pulse width timing	From 1 microsecond to 300 milliseconds, in steps of 1 microsecond. Timing repeatability: 100 nanoseconds for pulses up to 1 millisecond.	
Delay from trigger to pulse	From 4 microseconds to 300 milliseconds in steps of 1 microsecond. Timing repeatability: 2 microseconds.	From 4 microseconds to 300 milliseconds in steps of 1 microsecond. Timing repeatability: 1 microsecond (depending on conditions).
Supply voltage	Regulated or unregulated, 12V to 48V.	
Dimensions	215mm long x 54mm wide x 82mm high.	
Weight	600g	
Mounting	Panel mounting; 6 x M4 tapped holes.	
Standards	CE, RoHS	