



# Power Sentry® Constant Power FAQs

## Questions & Answers

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### **What is the input voltage of the Power Sentry constant power series?**

Both PS1055CP and PS1555CP have 120-277VAC (50-60Hz) universal input.

### **What is the minimum output voltage?**

15VDC and 20VDC for PS1055CP and PS1555CP respectively.

### **What is the maximum output voltage?**

55VDC

### **How do constant power emergency drivers differ from a constant current emergency driver?**

With the constant current designs your voltage and current are fixed to a predetermined level. Constant power designs are voltage sensing within a predetermined range and adjust the current accordingly so that a constant wattage is applied to the load. Refer to comparison chart for additional details.

### **Is the test switching line or low voltage for the constant power products?**

Low voltage.

### **What is the maximum remote mount distance?**

Half the mounting distance allowed by the driver. We have tested the Power Sentry products up to 25ft with favorable results.

### **What is the max distance for wall test switch?**

For the remote mount test switch, it is up to 25ft.

### **Can the Power Sentry constant power product be field installed?**

PS1055CP and PS1555CP are both UL listed for universal field install.

### **Can the constant power product be field installed in non-Acuity Brands lighting fixtures?**

PS1055CP and PS1555CP can be field installed in both Acuity Brands® and non-Acuity Brands lighting fixtures.

### **Are the constant power products CA Title 20 compliant?**

Yes. The constant power products are all CA Title 20 compliant.

### **Do the constant power products require additional hardware for self-diagnostics?**

No. Self-diagnostics is a standard integrated feature for the Power Sentry constant power series.

### **What is the ambient temperature rating for the constant power products?**

The constant power products have ambient rating of 5°C (41°F) to 50°C (122°F) in the Power Sentry® technical documents which represents 10°C (50°F) reduction of the temperature specification band per UL requirements. The Power Sentry products are tested to +/- 5°C (41°F) of the temperature specification limits reported in technical documents.

### **Will the light output for the constant power series stay the same throughout the 90 minutes?**

Yes. The constant power solutions design prevents light output degradation by auto-sensing the LED load needs and auto-adjusting the emergency driver output to optimize the utilization of available energy and ensure constant light output throughout the 90-minute emergency operation.

### **How can I determine the delivered lumens in emergency mode?**

Delivered lumens = 1.25 x P x LPW

P = Output power of emergency driver.

LPW = Lumens per watt rating of the luminaire.

PS1055CP, P = 10W and PS1555CP, P = 15W documents.

The LPW rating (consult luminaire spec sheet)

is also available at Designlight Consortium®.

### **Why do these products have an FMC option?**

The FMC option provides flexible metal conduit for easy remote mounting in a plenum.



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	Constant Current (CC) PS1030/PS1050	Constant Power (CP) PS1055CP	So What?
	UL recognized and UL Classified for Field Install	<b>UL Listed</b>	CC has to be tested and certified for each luminaire. CP is UL listed and can be added to the UL file without testing (factory install) and universal field install within the Vf range. Vf = voltage requirement of the LED load.
Luminaires Covered	29 Acuity Luminaires	<b>All Commercial Indoor</b>	Universally compatible within the Vf range (15VDC-55VDC)
Battery Technology	Ni-Cad	<b>Lithium Iron Phosphate</b>	Lithium is: <ul style="list-style-type: none"> <li>• Double the power density (saves space)</li> <li>• Slightly longer life (6 yrs vs 5 yrs)</li> <li>• Shorter shelf life (12M vs 36M)</li> <li>• Same ambient temp range</li> <li>• Eco-friendly</li> </ul>
Output Voltage and Electrical Technology	Voltage Specific – 30VDC or 50VDC	<b>Voltage Adapting – 15VDC-55VDC</b>	CP has greater light output reliability. Slight changes in Vf can change light output significantly for CC so more skus required. CP includes soft start to protect from false failure on start-up and fold-back ensures 90 min thru life of product. CP has immunity to RF emissions. Multiple patents pending.
CEC Title 20 compliance	With PSBC module (not compatible with PSSD2)	<b>Standard PSBC</b>	CP saves skus and cleaner overall solution. For CA, the cost is equal.
Self-test/ diagnostics	With PSSD2 (Not compatible with PSBC)	<b>Standard SD</b>	CP saves skus and cleaner overall solution. For SD requirements, it saves you money. History logging included.
Network level communication	Not Available	<b>Standard</b> via Acuity LEDcode protocol	CP totally automates the monthly and annual testing and record keeping required by the Life Safety Code. Future CP versions will automate.
Field activation of emergency system	Factory installed products are shipped with TSPL disconnected	<b>AC Activate</b> allows TSPL to safely ship while connected	AC activate protects the battery and saves contractor labor
Size	13.3" x 2.2" x 1.2" (L x Wx H)	<b>10.0" x 2.2" x 1.2" (L x Wx H)</b>	3.3" shorter enables fitting in more fixtures. From fit perspective, shorter than current 7W products

Visit us at [www.acuitybrands.com/brands/components/power-sentry](http://www.acuitybrands.com/brands/components/power-sentry) for more information.