Optimized for LED Light Units
for Line Scan Applications

Analog Control Units

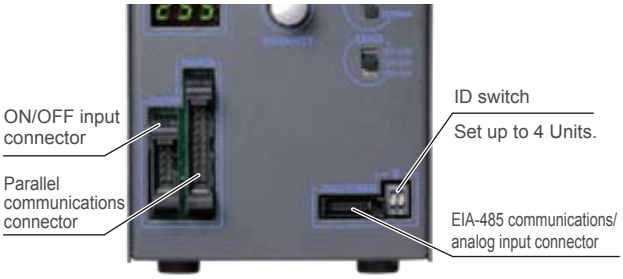
PSB3-30024

Improving Performance

Parallel, serial, and analog control support all in a single Unit at an affordable price

Includes External Control

Equipped for parallel, serial, and analog control all in a single Unit.



Control mode	Description	
Parallel communications	Light intensity control	Control the intensity to 256 levels via parallel signal inputs.
EIA-485 communications	Light intensity control	Command input for 256 levels of intensity via EIA-485 communications.
	ON/OFF control	Command input via EIA-485 communications
Analog input	Light intensity control	Control the intensity to 256 levels via an analog voltage (0 to 5 V).

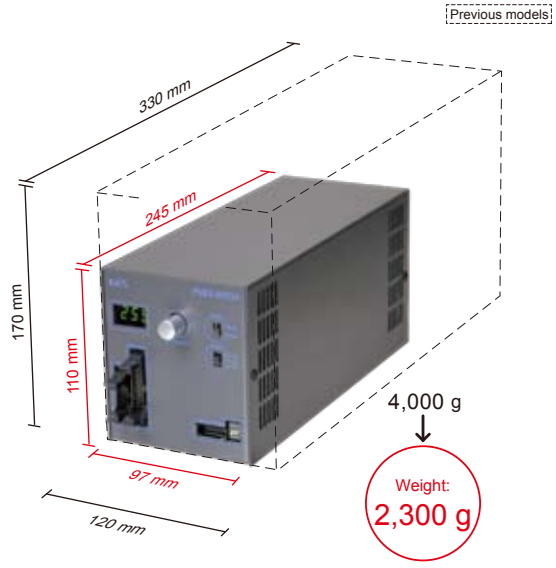
ON/OFF input connector

ON/OFF control is possible in combination with parallel, serial, or analog control.

ON/OFF control	ON/OFF control via OFF signal input (parallel bit method).

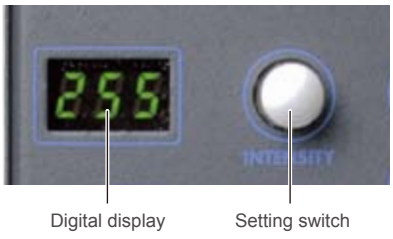
Compact, Lightweight Design

Compact design: 97-mm width, 110-mm height, 245-mm depth.



Improved Usability

Supports the reproducibility of intensity values through a digital display.



Quick Operation through a Pushbutton Dial

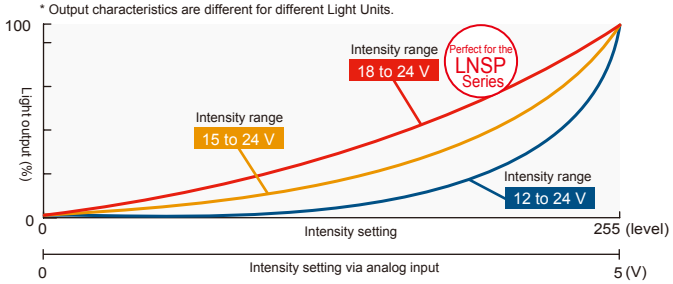
- Intensity setting to 256 levels.
- Turn ON the power supply while pressing the button for external control mode.
- Push and hold for two seconds to lock the intensity value.

Optimal Intensity Settings through Minimum Intensity Value Switching

Output voltage
18 to 24 V
15 to 24 V
12 to 24 V

Select the intensity range that best suits the Light Unit.

* Output characteristics are different for different Light Units.

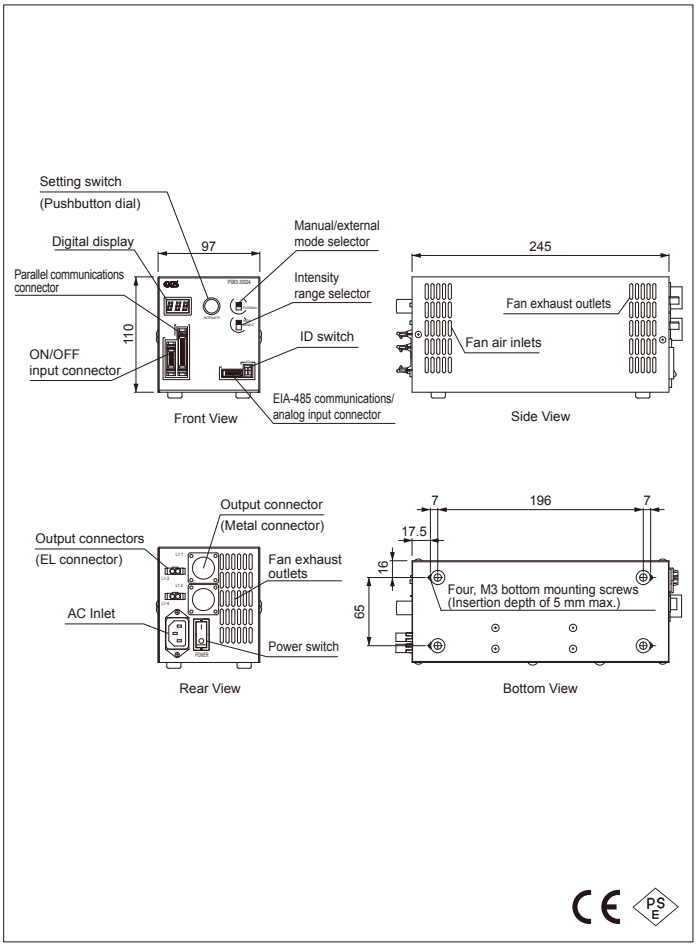


*This graph is for illustration only.

Specifications

Model		PSB3-30024	
Direct number		2000762	
Lighting method		Constant lighting	
Drive method		Constant-voltage system	
Light intensity control method		Variable-voltage control	
Number of channels		1 channel	
Applicable Light Unit rating		24 V 300 W	
Light intensity control	Manual and external intensity control	Front manual/external switch (MODE)	
	Variable output voltage range	Select between 3 ranges via the front intensity range selector (RANGE).	
	Manual	Set any of 256 levels via the setting switch. Press and hold the switch for 2 seconds to lock the intensity value.	
	External	Parallel communications	8-bit intensity value setting (B0 to B7) and write signal (WR)
		Serial communications	Command input via EIA-485 communications
		Analog input	Analog voltage (0 to 5 V)
		External control mode can be selected by pushing the setting switch while turning ON the power to the Control Unit.	
Lighting control	Parallel bit input	Lighting signal (OFF)	
	Serial communications	Command input via EIA-485 communications	
EIA-485 communications settings	ID	Set via the front ID switch (00 to 03). Maximum of 4 connected Units.	
	Terminating resistance	Set via the front ID switch (terminating resistance is ON only when the ID is 00).	
Lighting delay (typ.)	0.1 s		
Error detection display	"Err" displayed on front-panel digital display		
Error detection output	Error is output and light output is stopped for internal AC/DC error.		
	External control connector	Error output terminal (0C, 0E), photocoupler insulation, open-collector output, alarm open (load current of less than 10 mA), and error status (serial communications)	
Over current protection	Operation at 105% of the rated current. Protection reset after the power reactibation.		
Over voltage protection	Operation at 120% to 155% of the rated current. Protection reset after the power reactibation.		
Rated input voltage	100-240 VAC		
Power consumption (typ.)	410 VA		
Frequency	50/60 Hz		
Inrush current (typ.)	20 A/40 A (primary/secondary value at 100 VAC), 40 A/40 A (primary/secondary value at 240 VAC) * From a cold start		
Ground leakage current	3.5 mA max. (264 V AC, 60 Hz, with no load)		
Output voltage variation range (typ.)	Select between 3 ranges via the front intensity range selector.		
	12 to 24 V *With no load.		
	15 to 24 V *With no load.		
	18 to 24 V *With no load.		
Operating temperature and humidity	Temperature: 0 to 40°C, Humidity: 20% to 85%RH (with no condensation)		
Storage temperature and humidity	Temperature: −20 to 60°C, Humidity: 20% to 85%RH (with no condensation)		
Vibration resistance	Acceleration: 19.6 m/s^2, frequency: 10 to 55 Hz, cycles: 3 minutes, sweep cycle: for 1 hour each in X, Y, and Z directions		
Cooling method	Forced air cooling		
CE Marking	Conforms to safety standard EN 61010-1.	Conforms to EMC standard EN 61326-1, Class A.	
Environmental regulations	RoHS compliant		
Material, coating, and surface processing	Steel plate, thickness of cover: 1.0, thickness of chassis: 1.6, N3 leather tone finish		
Weight	2,300 g max.		
Accessories	2-meter long 3-prong power cord with ground terminal (1)		

Dimension Diagrams (mm)



Options

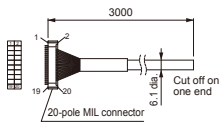
External Control Cables

These cables are used for parallel communications, EIA-485 communications, and the analog input.

(mm)

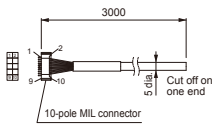
■Parallel Communications Cable

Direct number: 3000683
Model: EXCB2-M20-3



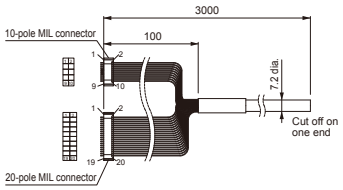
■ON/OFF Input Cable

Direct number: 3000682
Model: EXCB2-M10-3



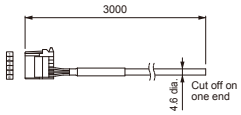
■Parallel Communications and ON/OFF Input Branch Cable

Direct number: 3000684
Model: EXCB2-M10M20-3



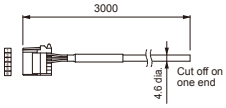
■Analog Input Cable

Direct number: 3000687
Model: EXCB2-E6AN-3



■EIA-485 Communications Cable

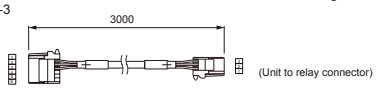
Direct number: 3000686
Model: EXCB2-E6SR-3



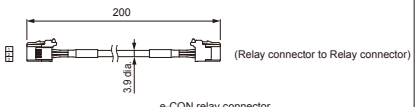
■EIA-485 Communications Relay Cable

This cable is used to connect two or more Control Units together.

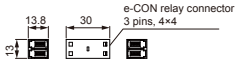
Direct number: 3000717
Model: EXCB2-E6SR-E3-3



Direct number: 3000721
Model: EXCB2-E3-E3-0.2

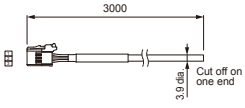


Direct number: 3000720
Model: ECNR-E3CN4



■EIA-485 Communications Relay Cable

Direct number: 3000685
Model: EXCB2-E3-3



This cable is used to connect to an external device when connecting two or more Control Units together.