

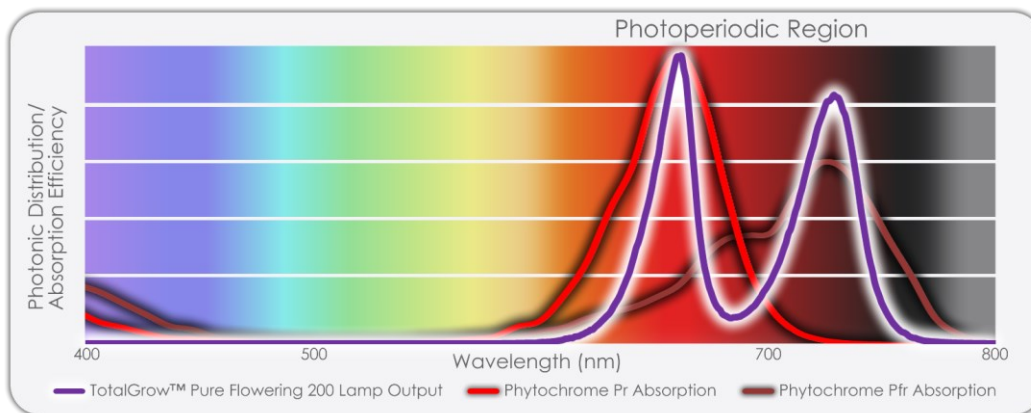
TotalGrow Solar Long-Day Light



Trigger long-day responses to control flowering efficiently, effectively, *anywhere*.

- Perfect spectrum to ensure long-day responses with night interruption/day length extension
- Military grade battery and weather resistance
- All-in-one solar-powered lighting unit
- Does not attract insects

The Science of Photoperiodic Lighting




- Long or short day perception often triggers or prevents key behaviors, especially flowering vs. vegetative growth.
- Long days require the appropriate lighting spectrum extending the day before sunrise/after sunset or interrupting the night, e.g. 10pm – 2am, to keep dark periods less than 10 hours.
- The spectrum must properly activate the photoreceptor phytochrome with red (esp. 620-690nm) and far-red (esp. 690-750nm) light as shown above. A ratio of approx. 1:1 for red : far-red light is the only universally effective ratio for photoperiodic lighting.¹
- While usually still effective, higher far-red proportions than this induce stretching and lower quality crops.²





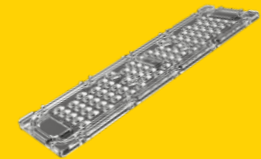
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¹ Craig, D. S., & Runkle, E. S. (2013). A Moderate to High Red to Far-red Light Ratio from Light-emitting Diodes Controls Flowering of Short-day Plants. *JASHS*, 138(3), 167-172.
² Cerdán, P. D., & Chory, J. (2003). Regulation of flowering time by light quality. *Nature*, 423(6942), 881-885.

Specifications:

Specifications:	60W	70W	120W
Product Number	TG6B-S95-1104	TG7B-S115-1104	TG6B-S145-1104
Power Consumption (W)	60	70	120
Output (µmol/s)	180	210	360
Typical Max Coverage	30 x 30 ft (9 x 9 m)	33 x 33 ft (10 x 10 m)	42 x 42 ft (13 x 13 m)
Typical Height Over Canopy	11 ft (3.5 m)	12 ft (4 m)	16 ft (5 m)
Length x Width x Height	40 x 20 x 12 in. (101 x 52 x 31 cm)	40 x 20 x 12 in. (101 x 52 x 31 cm)	55 x 21 x 12 in. (140 x 55 x 31 cm)
Weight (lbs.)	39 lbs. (17.5 kg)	39 lbs. (17.5 kg)	57 lbs. (26 kg)
Solar Panel Rated Power	95W	115W	145W
Solar Panel Rated Voltage	18V	18V	36V
Battery Operating Voltage	12.8V	12.8V	25.6V
Battery Capacity	44.2Ah	44.2Ah	47.6Ah
Battery Charging Time	6 hours	6 hours	6 hours
Battery Type	LiFeO4, military grade	LiFeO4, military grade	LiFeO4, military grade
Operating Temperature	-4°F to 120°F / -20°C to 50°C	-4°F to 120°F / -20°C to 50°C	-4°F to 120°F / -20°C to 50°C
Projected Service Life / Warranty	50,000 hours/ 3 year 	50,000 hours/ 3 year 	50,000 hours/ 3 year 
Waterproof	IP65	IP65	IP65
Typical Height Over Canopy	11 ft (3.5 m)	12 ft (4 m)	16 ft (5 m)
Typical Max Coverage	30 x 30 ft (9 x 9 m)	33 x 33 ft (10 x 10 m)	42 x 42 ft (13 x 13 m)

Features:

				
Ultra Efficient monocrystalline silicon solar panes	Moisture resisting waterproof breathable valve	Easy installation with adjustable, labeled bracket	One-piece, heavy duty ADC12 rated aluminum die casting	High transmittance optics for excellent uniformity