DIGI-LUMEN

LED the way to a Brighter Future

digilumen.com.au



DIGI-LUMEN Horticultural Lighting Solutions

DIGI-LUMEN

A new era of affordable grow lighting, where technology meets the art of cultivation. We understand that every grower, whether a hobbyist or a professional, seeks to elevate their plant's true potential. Our range of LED & HID grow lights are meticulously designed for both grow rooms and greenhouses, offering solutions that cater to every stage of plant growth.

From seedling to harvest, DIGI-LUMEN LEDs provide the perfect photosynthetic spectrum you need to encourage robust plant development, increase yields, and shorten growth cycles.

Our energy-efficient design prioritises optimal plant health without compromising on performance. While LEDs and HID lighting have comparable energy consumption, the key advantage comes from the reduced heat output, which can lower HVAC demands in a controlled environment. Each item is backed by our commitment to quality, ensuring you have reliable, full-spectrum lighting solutions tailored to the unique needs of your crops. Whether you're enhancing your current setup or starting a new one, Digi-Lumen is here to light the way to your cultivation success.



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LED Growing Tips

- LED-powered greenhouses may require additional heating in cold climates. Warming the plant root zone to 25°C in cooler conditions can enhance plant growth rates.
- Plants grown under LEDs in lower ambient temperatures may require less watering compared to those under HID lighting. The use of well-drained plant growth media or soils is recommended.
- LED energy savings are achieved by reducing the heat load in indoor growing areas, thereby decreasing the need for air movement or HVAC systems.
- To optimise plant response, the elevated light intensity provided by LED systems should be paired with a corresponding increase in nutrient concentration.
 When employing high-PPFD LED lighting alongside CO2 supplementation, nutrient strength can be increased by up to 30% to support enhanced photosynthesis and growth. However, extreme caution must be exercised when applying high electrical conductivity (EC) nutrient solutions to avoid potential phytotoxicity or nutrient imbalances.
- LED lights supply the light energy required for photosynthesis. However, other environmental factors—including room temperature, airflow, circulation, growing medium, nutrient availability, and plant genetics are also critical in influencing plant development outcomes. A broader appreciation of all growth factors and their interrelationships will further enhance your likelihood of achieving successful outcomes.
- High-light plants typically thrive at a photosynthetic photon flux density (PPFD) of 500-800 µmol/m²/s, delivered by LED grow lighting. However, many sunadapted species, such as cacti, sunflowers, or cannabis, can tolerate and effectively utilise higher PPFD levels; when provided with adequate water, nutrient availability, and CO2 concentrations to support their elevated photosynthetic demands.
- Photoinhibition may occur in certain plants at PPFD above 1200 μmol/m²/s unless they are acclimated or genetically adapted to high light intensities.





- Full spectrum coverage over a 4.86 m² area
- Inbuilt 1000 W Driver
- Efficacy 2.7 µmol/J
- PPF 2700 μmol/s



OUTPUT SPECIFICATIONS

Maximum PPF @ 1000 Watts	2700 µmol/s
PPF Efficacy	2.7 μmol/J
Output PPFD (µmol/m²/s)	1384 @ 30cm

Model	HALO 1000 W XL - 10 BAR - BI FOLD
Light Source	3360 x Single Mount LED
Input Voltage	220 V-240 V AC
Frequency Range	50-60 Hz
Power/Watts	1000 W (max output)
Amps	4.17 A
Net Weight	14.5 kg
Light Beam Angle	120 Degrees
Body Case Material	Die Cast Pressed Aluminum
IP Rating	IP45 (water resistant)
Size	L-1640 mm x W-1110 mm x H-38 mm
Lifespan	>50,000 Hours
Min. Operating Temp	-25°C
Max. Operating Temp	40°C
Warranty	2 Year Warranty







- Full spectrum coverage over a 3.24 m² area
- Inbuilt 1000 W Driver
- Efficacy 2.7 µmol/J
- PPF 2700 μmol/s





OUTPUT SPECIFICATIONS

Maximum PPF @ 1000 Watts	2700 µmol/s
PPF Efficacy	2.7 μmol/J
Output PPFD (µmol/m²/s)	1360 @ 30cm

Model	HALO 1000 W – 9 Bar Tri Fold
Light Source	2988 x Single Mount LED
Input Voltage	220 V-240 V AC
Frequency Range	50-60 Hz
Power/Watts	1000 W (max output)
Amps	4.17 A
Net Weight	15 kg
Light Beam Angle	120 Degrees
Body Case Material	Die Cast Pressed Aluminum
IP Rating	IP45 (water resistant)
Size	L-1110 mm x W-1065 mm x H-70 mm
Lifespan	>50,000 Hours
Min. Operating Temp	-25°C
Max. Operating Temp	40°C
Warranty	2 Year Warranty







DUAL SPECTRUM

- Extended spectrum coverage over a 2.25 m² area
- Inbuilt 780 W Driver
- Efficacy 2.7 µmol/J
- PPF 2106 μmol/s







OUTPUT SPECIFICATIONS

Maximum PPF @ 780 Watts	2106 µmol/s
PPF Efficacy	2.7 μmol/J
Output PPFD (μmol/m²/s)	1240 @ 30cm

Model	HALO Dual Spectrum 780 W 6 Bar
Light Source	2364 x Single Mount LED
2160 White 4000K + 96 Red 660 nm + 60 UVA 395 nm + 48 Far-red 7	
Input Voltage	220 V-240 V AC
Frequency Range	50-60 Hz
Power/Watts	780 W (max output)
Amps	3.54 A
Net Weight	6.8 kg
Light Beam Angle	120 Degrees
Body Case Material	Die Cast Pressed Aluminum
IP Rating	IP45 (water resistant)
Size	L 1100 mm x W 1060 mm x H 38 mm
Lifespan	>50,000 Hours
Min. Operating Temp	-25°C
Max. Operating Temp	40°C
Warranty	2 Year Warranty
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- Full spectrum coverage over a 2.25 m² area
- Inbuilt 720 W Driver
- Efficacy 2.7 µmol/J
- PPF 1944 μmol/s









OUTPUT SPECIFICATIONS

Maximum PPF @ 720 Watts	1944 µmol/s
PPF Efficacy	2.7 μmol/J
Output PPFD (µmol/m²/s)	1158 @ 30cm

Model	HALO 720 W – 6 Bar
Light Source	2016 x Single Mount LED
Input Voltage	220 V-240 V AC
Frequency Range	50-60 Hz
Power/Watts	720 W (max output)
Amps	3.0 A @720 W
Net Weight	6.8 kg
Light Beam Angle	120 Degrees
Body Case Material	Die Cast Pressed Aluminum
IP Rating	IP45 (water resistant)
Size	L-1110 mm x W-1065 mm x H-70 mm
Lifespan	>50,000 Hours
Min. Operating Temp	-25°C
Max. Operating Temp	40°C
Warranty	2 Year Warranty





- Full spectrum coverage over a 1.50 m² area
- Inbuilt 600 W Driver
- Efficacy 2.65 µmol/J
- PPF 1820 μmol/s



OUTPUT SPECIFICATIONS

Maximum PPF @ 720 Watts	1870 µmol/s
PPF @ 690 Watts	1820 µmol/s on Super Lumen settings
PPF Efficacy	2.65 μmol/J
Output PPFD (µmol/m²/s)	1235 @ 30cm



Model	RETRO 600 W - 6 Bar
Light Source	1992 x Single Mount Diode LED
Input Voltage	220 V-240 V AC
Frequency Range	50-60 Hz
Power/Watts	720 W (max output)
Amps	2.9 A (on Super Lumen Setting)
Net Weight	7.3 kg
Light Beam Angle	120 Degrees
Body Case Material	Die Cast Pressed Aluminum
IP Rating	IP45 (water resistant)
Size	L-1105 mm x W-1067 mm x H-54 mm
Lifespan	>50,000 Hours
Min. Operating Temp	-25°C
Max. Operating Temp	40°C
Warranty	3 Year Warranty





- Full spectrum coverage over a 1 m² area
- Inbuilt 400 W Driver
- Efficacy 2.7 µmol/J
- PPF 1080 μmol/s



OUTPUT SPECIFICATIONS

Maximum PPF @ 400 Watts	1080 µmol/s
PPF Efficacy	2.7 μmol/J
Output PPFD (µmol/m²/s)	1394 @ 30cm

Model	HALO 400 W - 6 Bar
Light Source	1128 x Single Mount LED
Input Voltage	220 V-240 V AC
Frequency Range	50-60 Hz
Power/Watts	400 W (max output)
Amps	1.7 A
Net Weight	3.6 kg
Light Beam Angle	120 Degrees
Body Case Material	Die Cast Pressed Aluminum
IP Rating	IP45 (water resistant)
Size	L 580 mm x W 580 mm x H 38 mm
Lifespan	>50,000 Hours
Min. Operating Temp	-25°C
Max. Operating Temp	40°C
Warranty	2 Year Warranty



BARS 250 W LED

- Full spectrum side lighting
- Inbuilt 250 W Driver
- Efficacy 2.7 µmol/J
- PPF 662 µmol/s



OUTPUT SPECIFICATIONS

PPF @ 250 Watts (1 x 2 bar)	662 µmol/s
PPF Efficacy	2.65 μmol/J

Model	Side Bar Array - 2 Bar Fixture
Light Source	672 x Single Mount Diodes LED's
Input Voltage	220 V-240 V AC
Frequency Range	50-60 Hz
Power/Watts	250 W
Amps	1.13 A
Net Weight	2.6 kg (per 2 bar fixture)
Light Beam Angle	120 Degrees
Body Case Material	Die Cast Pressed Aluminum
IP Rating	IP45 (water resistant)
Size	L 1105 mm x W 350 mm x H 53 mm
Lifespan	>50,000 Hours
Min. Operating Temp	-40°C
Max. Operating Temp	40°C
Warranty	2 Year Warranty



HID Lamps



The DIGI-LUMEN 600 W Metal Halide Lamp, features a robust quartz outer jacket and a high-pressure internal arc tube. This design ensures durability and consistent performance throughout your plants' vegetative phase. The lamp emits 6000K cool white light, meticulously calibrated to promote lush, vigorous vegetative growth. This spectrum is ideal for encouraging strong stem development and rich green foliage, setting the foundation for a bountiful harvest.

TECHNICAL SPECIFICATIONS	
Power	600 W
Lamp Type	Metal Halide
Color Temperature	6000 K
Photosynthetic Photon Flux (PPF)	988 µmol/s
Luminous Flux	57,600 lumens
Base Type	E40







1.0 = 7.067 e + 003 m W/nm







Spectrum

0.8

HID Lamps



The DIGI-LUMEN 600 W HPS lamp is engineered specifically for peak flower production. The blended 2000K spectrum is tailored for superior flowering, ensuring your plants receive the perfect light to thrive. Increased fruit and flower size result from our lamp's boosted far-red output. Spectrum enhancement is key to stimulating plant growth processes that lead to bigger, more abundant harvests. When paired with high-frequency electronic ballasts operating at over 60 kHz, our HPS lamp delivers unparalleled performance.

Power	600 W
Lamp Type	High Pressure Sodium
Color Temperature	2000 K
Photosynthetic Photon Flux (PPF)	1075 µmol/s
Luminous Flux	92,000 lumens
Base Type	E40



Electronic Ballasts

DIGI-LUMEN 600U DIGITAL BALLAST



Digi-Lumen introduces the latest in digital ballast technology, offering cost-effective and stable performance under harsh conditions. These ballasts are protected by a fast-blow fuse and feature four adjustable power settings:

- Seed & Clone Mode: 250 W
- Vegetative & Power Save Mode: 400 W
- Flower Mode: 600 W
- Super-Lumen Mode: 690 W (for enhanced flowering)

The dimming capability allows for light output and temperature management. Compatible with both metal halide (MH) and high-pressure sodium (HPS) 600 W single-ended lamps. Digi-Lumen ballasts provide a versatile lighting solution for all stages of plant growth.

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The Digi-Lumen PWM Digital Ballast represents the forefront of digital ballast technology, specifically engineered for compatibility with the Digi-Lumen Retro Array LED. These ballasts are protected by a fast-blow fuse and feature four adjustable power settings:

- Seed & Clone Mode: 250 W
- Vegetative & Power Save Mode: 400 W
- Flower Mode: 600 W
- Super-Lumen Mode: 690 W (for enhanced flowering)
- Pulse Width Modulation (PWM) Ports: Equipped with two PWM ports, this ballast facilitates the daisy-chaining of up to 30 units, allowing centralised control through the ECO Smart Controller.
- Compatibility: While this ballast can operate 600 W lamps, it is not advised to use high intensity discharge (HID lamps) with the ECO Smart Controller for control purposes.

The dimming capability allows for light output and temperature management. Digi-Lumen PWM ballasts when used to drive the Digi-Lumen Retro Array, provides a versatile lighting solution for all stages of plant growth.

LED Controllers

ECO Smart Controller



On/Off	Timing
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Temperature / humidity sensor included



Control up to 30 units 250 W LED Side lighting 400 W HALO LED 600 W RETRO LED 720 W HALO LED 1000 W HALO LED 1000 W XL HALO LED

ECO Smart Controller Multi Fixture Controller for 0-10 V LEDs





SMART Touchscreen Controller



SMART Touchscreen Controller

For use with 780 W HALO Dual Spectrum LED



LED Product Summary

Product	Features	Benefits
1000 W Halo 1000 W XL Halo	Full-spectrum illumination spanning the photosynthetically active radiation (PAR) range	Designed to provide uniform coverage across an expanded area.
780 W Halo Dual Spectrum	Comprehensive full-spectrum output, encompassing photosynthetically active radiation (PAR) with extended ultraviolet (UV) and far-red (FR) wavelength ranges.	Maximised photosynthesis, plant development, and resource efficiency to enhance the health, productivity, and profitability of high-light and specialty crops in controlled environments.
720 W Halo	Serves as a cost-effective workhorse, delivering full-spectrum illumination across the photosynthetically active radiation (PAR) range.	Reliable, high-performance output for vigorous growth and enhanced yields.
600 W Retro	Uniquely engineered as the only LED array compatible with a 600 W electronic ballast. Full-spectrum illumination across the photosynthetically active radiation (PAR) range.	Can be interchanged with a high-pressure sodium (HPS) or metal halide lamp to supplement radiant heat in cooler climates. Supports robust growth and increased yields.
400 W Halo	Specifically engineered for smaller spaces. Full-spectrum illumination across the photosynthetically active radiation (PAR) range.	Reliable, high-performance output to promote vigorous plant development and enhanced crop productivity.
250 W Side Bars	Designed as supplementary lighting. Provides targeted full-spectrum illumination across the photosynthetically active radiation (PAR) range to enhance side and under-canopy exposure.	All-around plant development and optimised yield potential throughout the entire canopy.

LED Range



DIGI-LUMEN

Contact Us

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