

Lighting

Home Grown

Issue 16



**GroWell**  
The growing experts

# LED'S

## The Telos Range Explained

**Find out why these lights are  
taking the industry by storm!**

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# Why choose a Telos LED light?

LED grow lights have been on the market for many years now, but previous models were never quite fit for purpose... this all changed with the launch of the Telos range! You can expect highly efficient, cool-running products – an absolute god-send during the hot summer months – plus so much more!

## High PAR Output



Full spectrum for use from start to finish

## Mega-Efficient



Low power, low heat, low running costs

## Ultra-Silent



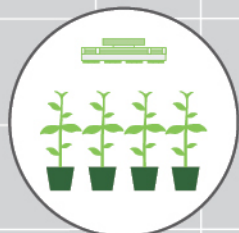
Quiet, passive cooling with no fan

## Super-Reliable



Effective for 85,000 hours (up to 10 years)

## Even Light Coverage



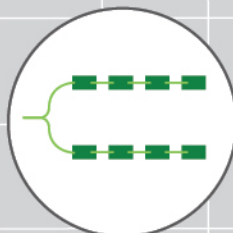
Holographic optics enable complete crop uniformity

## Modular Design



Easy to replace and upgrade LED's

## Easily Expandable



Link numerous lights using 1 power source

## Quality Components



Industry leading CREE LED's & Meanwell driver

## LED Light Buyers' Guide

### Design: Compact vs. Vertical Stacking

The compact Telos units have unique optics that project light in many directions for maximum coverage of the canopy. Vertical stacking designs are much bigger, more expensive and typically for multi-level gardens.

### Light: PAR (umol) vs. PPF vs PPFD

All are valid but slightly different measurements! PAR is plant available light, PPF is the total amount of PAR light outputted per second and PPFD is the total amount of PAR light outputted per second over 1m x 1m.

### Heat: Convection vs. Radiant

Like other LEDs, Telos lights give off heat via convection – i.e. it rises up – and this proves to be much easier to remove with your fan(s) than the radiant heat produced by HPS lights (which is directed over plants).

### Results: Yields vs. Quality

The incredible light spectrum and colour rendering index/comparability to sunlight (85cri) of Telos lights guarantees better quality of fruits and flowers than HPS lights. Choose the right model(s) and yields will be fantastic too!

## LED vs. HPS - Cost Breakdown!

LED lights are famously efficient... but how much money can you save by using them? We did the maths and found out for you, comparing HPS lights against Telos LED units!

### Save £181-299 a year vs. 600W magnetic HPS

	1x 0010	2x 0008	1x 600W HPS Mag
Power Usage	300W	480W	660W
Electricity	£197.57	£316.11	£434.65
Replacement Reflectors	0	0	1 x £18
Replacement Lamps	0	0	3 x £14.95
TOTAL	£197.57	£316.11	£497.50

### Save £166-284 a year vs. 600W digital HPS

	1x 0010	2x 0008	1x 600W HPS Dig
Power Usage	300W	480W	636W
Electricity	£197.57	£316.11	£418.84
Replacement Reflectors	0	0	1 x £18
Replacement Lamps	0	0	3 x £14.95
TOTAL	£197.57	£316.11	£481.69

### Save £384-463 a year vs. 1000W pro digi. HPS

	2x 0010	4x 0006	1x 1000W HPS Dig
Power Usage	600W	720W	1060W
Electricity	£395.14	£474.16	£698.07
Replacement Reflectors	0	0	1 x £29.95
Replacement Lamps	0	0	1 x £129.95
TOTAL	£395.14	£474.16	£857.97

Energy cost calculations at 14p per kW

4 full cycles of 504 hours Veg + 672 hours Flower = 4,704 hours a year  
x light power usage = total Watts used a year  
/1000 = total kW per year  
x 0.14 = cost per year!



Dan

## Summer tips for Telos

With a Telos in your room, try the following:

- Reduce extraction and intake rates (due to less heat), using a suitable fan controller. EC fan equipment will actually save you money at lower speeds!
- Reap the benefits of optimum CO<sub>2</sub> levels (lower extraction rates increase the time for CO<sub>2</sub> enrichment). Consider bagged, bottled or propane gas.
- Increase nutrient strength (less heat means less transpiration/water loss within plants) to capitalise on extra growth potential.



# How to switch to Telos LED lights

Switching from an HPS light (or a different LED light) to a Telos LED light is simple with the help of our light layout guide! It does all of the hard work for you, identifying the model type and amount that will suit your needs based on the size of growing area. See below for more details.

## See more in-store!

Telos LED lights are up and running in every GroWell store! We continue to produce plenty of amazing crops with them!



## Telos LED Grow Lights

Forever stay at the top of your game with a Telos LED Grow Light! You'll get a future-proof product that's competing against premium HPS offerings at 2+  $\mu\text{mol}$  per Watt (upgradable through time), full spectrum in design and boasting an incredible colour rendering index of 85cri. Each one is built to last for up to 10 years, featuring an industry leading Meanwell driver and highly sophisticated CREE LED modules that can all be easily updated as technology advances forward.

- **Amazing PAR output: 2+  $\mu\text{mol}/\text{W}$**
- **High quality, reliable & quiet (no fan)**
- **Even light intensity & coverage**
- **Low power, heat & running costs**
- **Designed for the entire crop cycle**
- **3 year manufacturer's warranty**



Modular design allows for future upgrades of LED panels



Completely sealed units for dust and moisture protection

### GN Telos 0006



**4170** GN Telos 0006 LED - 180W **£319.95**

### GN Telos 0008



**3485** GN Telos 0008 LED - 240W **£419.95**

### GN Telos 0010



**3684** GN Telos 0010 LED - 300W **£519.95**

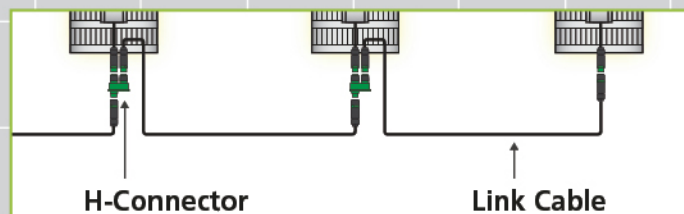
## Telos Connector & Cable

Using H-Connectors and a Link Cable, you can run 10x Telos 0006, 8x Telos 0008 or 6x Telos 0010 through 1 power source (without a contactor).



**3642** Telos H-Connector **£9.60**

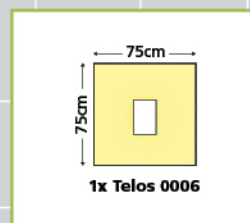
**3643** Telos Link Cable - 2m **£14.40**



## Telos LED Light Layouts

If you're swapping from HPS to Telos LED lights, matching wattages isn't necessarily the best strategy. In terms of yield, 1 Telos Watt roughly equals 1.666 HPS Watt (on average). This means a Telos delivers more light on a lower wattage. To get the best yield from a given area, refer to the following:

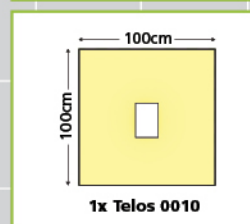
AREA	RECOMMENDED TELOS	TOTAL WATTAGE	TOTAL PPF
75cm x 75cm	1 x 0006	180W	378
1m x 1m	1 x 0010	300W	630
1.2m x 1.2m	2 x 0008	480W	1,008
2.4m x 1.2m	4 x 0008	960W	2,016
1m x 1.5m	2 x 0008	480W	1,008
1m x 3m	3 x 0010	900W	1,890
1.5m x 2m	3 x 0010	900W	1,890
1.5m x 1.5m	2 x 0010	600W	1,260
2.4m x 2.4m	8 x 0008	1,920W	4,032
3.6m x 2.4m	12 x 0008	2,880W	6,048
3m x 3m	9 x 0010	2,700W	5,670



**75cm x 75cm Area**

**Optimum LED:**  
**1 x Telos 0006**

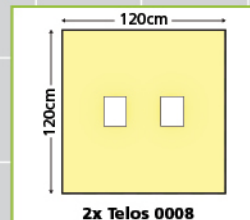
180W Telos: **Similar yields to 300W HPS**  
Total Watt: **180W**  
Total PPF: **378**



**1m x 1m Area**

**Optimum LED:**  
**1 x Telos 0010**

300W Telos: **Similar yields to 500W HPS**  
Total Watt: **300W**  
Total PPF: **630**



**1.2m x 1.2m Area**

**Optimum LED:**  
**2 x Telos 0008**

480W Telos: **Similar yields to 800W HPS**  
Total Watt: **480W**  
Total PPF: **1008**



# New Products Alert!



**GroWell**  
The growing experts

## TopClimate Water-Cooled Systems



**FROM £2499.99**

- 4681 TopClimate Elite 4000 £2,499.00
- 4682 TopClimate Elite 6000 £2,999.00
- 4683 TopClimate Elite 10000 £3,699.00
- 4684 TopClimate Elite 15000 £4,299.00

## Ecothrive Eco-Life Soil & Life-Cycle

**See more online!**

Watch our Eco-Life videos: search for "GroWell Eco-Life" on youtube



**100% ORGANIC**

- 4215 Ecothrive Eco-Life Soil - 40L £29.95
- 4690 Ecothrive Life-Cycle - 250g £2.95

## SHOGUN Start

**BEST FEED FOR YOUNG PLANTS**



- 4187 SHOGUN Start - 250ml £7.45
- 4188 SHOGUN Start - 1 Litre £14.95
- 4189 SHOGUN Start - 5 Litre £54.95

## Maxibright Pro-Select Digital Ballasts

**FROM £109.95**



- 4168 600W Maxibright Pro-Select Digi. Ballast £109.95
- 4169 1000W Maxibright Pro-Select Digi. Ballast £214.95

## AutoPot XL Systems

**FROM £164.95**



- 3812 AutoPot XL 4-Plant System £164.95
- 3749 AutoPot XL 8-Plant System £289.95
- 2355 AutoPot XL 12-Plant System £429.95
- 3434 AutoPot XL 16-Plant System £559.95
- 4146 AutoPot XL 24-Plant System £834.95

## TNB The Enhancer CO<sub>2</sub> Dispersal Canister

**UP TO 1200PPM OVER 2 WEEKS**



- 4584 TNB The Enhancer CO<sub>2</sub> - 240g Canister £24.95
- 4585 TNB The Enhancer CO<sub>2</sub> - 240g Refill Pack £14.95

## Biobizz Leaf-Coat

**See more online!**

Watch our Leaf-Coat video: search for "GroWell Leaf-Coat" on youtube



**AMAZING FOR CUTTINGS**



- 4224 Biobizz Leaf-Coat - 500ml £8.95

## Duct Connectors

**FROM £1.95**



- 3965 100mm Duct Connector £1.95
- 3963 125mm Duct Connector £2.25
- 3483 150mm Duct Connector £2.45
- 3933 200mm Duct Connector £2.95
- 3961 250mm Duct Connector £3.45
- 3259 315mm Duct Connector £4.45

## Expando Grow Tent Maximiser V2

**ONLY £29.95**



- 4575 Expando Grow Tent Maximiser V2 £29.95

## Hussarya Air-Cooled Systems

- 4068 Silence £2299.95
- 4069 Breeze £2899.95
- 4070 Storm £3950.00
- 4071 Typhoon £4995.00
- 4072 Hurricane £7999.00

