



FL100 GROW FIXTURE



The LED fixture suited for vertical farming and greenhouse installations

Highlights

- Control of spectral composition
- Dynamic control of the light intensity
- Innovative solution for growing in layers for vertical farming
- The natural replacement for the conventional HPS systems
- Minimize the use of Plant Growth Regulation (PGR)
- Control the intensity of the taste of herbs and strawberries
- Control the height of the plant
- Long lifetime with no reduction of the light output
- Consistent light on the plants due to an optical lens system (patent pending)
- Get a specific lighting plan based on your need for lighting

About FL100 Grow

FL100 Grow is suitable for growing in layers, can be interconnected - and is very suited for vertical farming. Also, the LED solutions suit most modern production greenhouses in the world and are designed to withstand the harsh environment of a glass house.

The minimalist design means easy installation using standard technology, and with a minimal shadow footprint, the FL100 Grow is able to produce good quality plants year round - year after year.

Controllable

One of the major benefits of this fixture is the ability for control. Investing in a controllable LED fixture means you always have the option to change the light to keep up

with new research findings, a new culture/culture stage, or simply to dim the fixture when less light is required.

Simply put, an investment in the FL100 will not leave you with a fixed spectrum but lead to endless possibilities.

The light spectrum can be designed for individual crops in combination with LCC4 climate control systems. An alternative to the LCC4 climate control system is a small Control Unit which controls up to 49 fixtures.

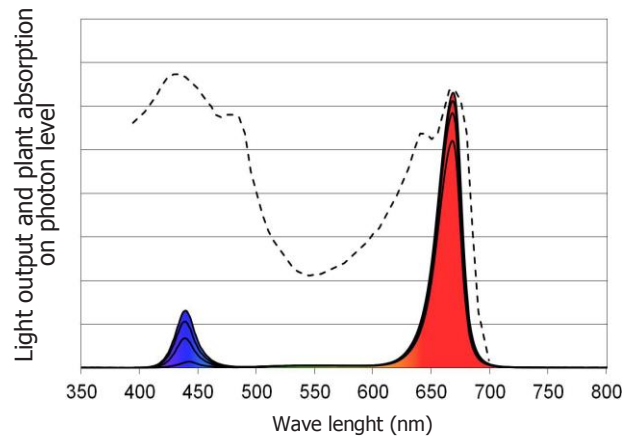
A further alternative is the LED Light Controller, which can be connected with your climate computer from another provider. That way you can maintain the full control of your LED installation.



SPECIFICATIONS / FL100 GROW FIXTURE

Parameter	
Power input	400 V AC / 50/60 Hz (380 - 480 V AC)
Nominal current	0.4 A
Power usage	75 - 150 watt
Light output	Up to 2.45 $\mu\text{mol/s}$ per Watt (depending on light modulation)
Net weight	3 kg
Dimensions L x W x H	1165 x 67 x 90 mm
Operating temperature	0 - 40° C
Light intensity decay	At least 70,000 hours at L80B10
Coverage	Up to 12 m ² (depending on light intensity)
Light modulation range	From 2 - 14 % blue light of total light
Green / white content	From 1 - 5 % of total light

The FL100 Grow is designed with an optical lens system that enables a traditional installation plan similar to HPS with homogenous distribution profile on plant level - but with less waste of light.



Spectral distribution of FL100 Grow together with a general action spectrum of plants. Spectral distribution for FL100 shown for 2, 6, 10, 14 % blue

FL100 Grow - Light Modulation Range

	75W	100W	125W	150W
2 % blue			✓	✓
4 % blue		✓	✓	✓
6 % blue		✓	✓	✓
8 % blue	✓	✓	✓	✓
10 % blue	✓	✓	✓	✓
12 % blue	✓	✓	✓	✓
14 % blue	✓	✓	✓	✓

Distributor:

Penny UK Ltd

16-18 Aston Fields Road
Whitehouse Ind Estate
Preston Brook, Runcorn
WA7 3DL
01565 777029
www.pennyukltd.com
Ver. 19092019

Head office:

Senmatic A/S
Industrivej 8, 5471 Sønderød, Denmark
Phone: +45 64 89 22 11
dgtsales@senmatic.com – www.senmatic.com