



Hortilight LED systems

## ScrogMaster Basic 1140

Technical Specification

Release Version: V1.0

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## Main advantages ScrogMaster Basic

### 1. High efficiency and Energy saving

The ScrogMaster Basic is a high efficiency LED grow light. Tests have shown that LED grow lights give plants greater light intensity and grow rates than standard HPS grow lights, yet using only 30% to 50% of the electricity.

### 2. Long lifespan

The LEDs used for the ScrogMaster Basic are SMD 3030 LEDs for Horticulture environment, like high humidity and severe temperature. The LEDs are also computer SMT mounted to the PCB, which guarantees high quality and high reliability with a lifespan up to 35.000 hours (50.000 hours under lab conditions).

### 3. Setup required

The ScrogMaster Basic requires a simple setup. The LED Driver with dim control needs to be plugged to the frame with LED Bars. After connecting the LED Driver, the ScrogMaster Basic can be plugged directly into AC100 to AC277 Volts power socket.

### 4. Waterproof

The LED Drivers, LED Bars and wire connectors are IP65 waterproof. The LEDs are attached to the aluminum frame and waterproof sealed.

### 5. SSP technology and electrical protection

The ScrogMaster Basic uses SSP technology. SSP technology restricts the DC output voltage to never be higher than the LED chips Voltage. It avoids the LEDs from higher voltage shocking. The power design is also lightning- and surge-proof.

### 6. SPC technology for excellent performance

SPC technology guarantees the LED bars are more stable. If any of the LED chips does fault, it will not affect other LEDs. The high quality SSP and SPC design makes the ScrogMaster Basic solid and safe.

### 7. Advanced thermal design

The LEDs are passively cooled by the aluminum frame of the LED Bars. The aluminum PCB is directly attached to the aluminum body of the LED Bars for excellent heat dissipation. Passive LED cooling is preferred above active cooling. No moving parts are needed, which is energy efficient and requires no maintenance.

### 8. Powerful full spectrum

The ScrogMaster Basic is provided with SMD 3030 LEDs. The LEDs do have a high PPF per Watt efficiency. The LEDs are waterproof sealed and not covered by glass, which does improve the efficiency by 10%. This is why the ScrogMaster Basic does have an efficiency of over 2,3  $\mu\text{mol}/\text{J}$ , which is very high in this price range.

### 9. Environment friendly

A ScrogMaster doesn't contain the harmful substance HPS & MH have; no hazardous waste to deal with which makes our earth cleaner and greener. LEDs are superior in comparison to other lighting technologies in terms of negative environmental and health effects during the manufacturing process. Producing LEDs consumes far less energy than manufacturing other lighting and it was noted the LEDs contain no mercury and few if any toxins such as iodine and lead.

## Thermal test LED Bar

Thermal test results LED Bar											
Date	Time	Heat Sink		AL-PCB		Leg of LED		Air		LED to Air	
		°F	°C	°F	°C	°F	°C	°F	°C	°F	°C
18th September	12:30	129,2	54	132,8	56	141,8	61	82,4	28	91,4	33
	13:00	127,4	53	131	55	141,8	61	84,2	29	89,6	32
	13:30	131	55	134,6	57	143,6	62	86	30	89,6	32
	14:00	131	55	136,4	58	143,6	62	86	30	89,6	32
	14:30	132,8	56	136,4	58	143,6	62	86	30	89,6	32
	15:00	132,8	56	138,2	59	145,4	63	86	30	91,4	33
	15:30	132,8	56	138,2	59	145,4	63	87,8	31	89,6	32
	16:00	134,6	57	136,4	58	145,4	63	87,8	31	89,6	32
	16:30	132,8	56	136,4	58	143,6	62	86	30	89,6	32
19st September	08:30	129,2	54	132,8	56	140	60	80,6	27	91,4	33
	09:00	131	55	134,6	57	140	60	80,6	27	91,4	33

### Note:

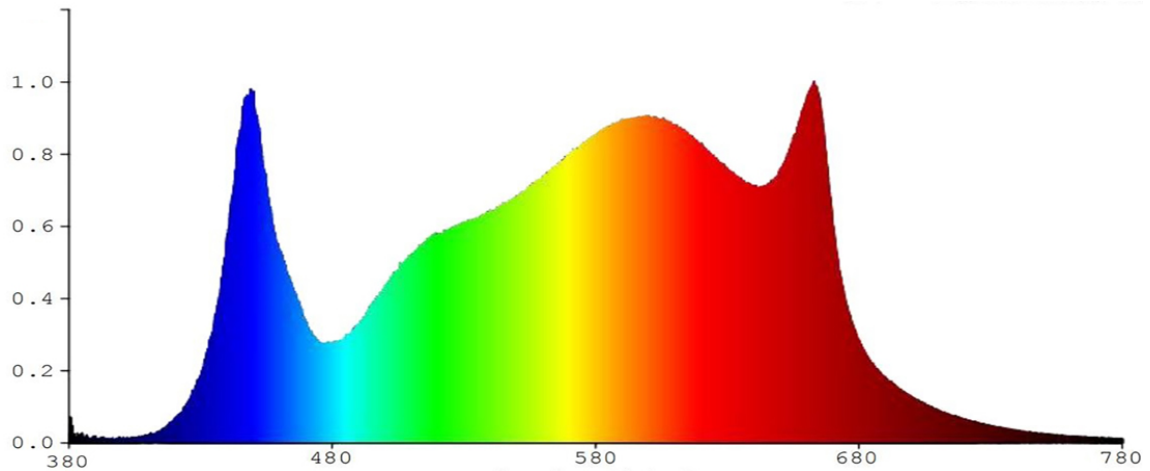
1. The temperature test was done from 12:30 18<sup>th</sup> September to 09:00 19<sup>th</sup> September 2019.
2. In the whole LED light, the highest temperature area is located in LEDs.
3. The temperature rising between LED to Air is within 33 °C.
4. Conclusion Thermal Test: LED chips work under good condition.
5. Under real circumstances the outcome may be slightly different to the above results.

## Pictures ScrogMaster Basic



1. A HortiLight ScrogMaster is suitable for indoor and greenhouse lighting.
2. The ScrogMaster Basic replaces a 600W to 750W HPS grow light.
3. Ideal for all phases of plant growth and works well in any garden, either hydroponics or soil based.
4. Uses below broad light spectrum required for plants photosynthesis.
5. OEM/ODM or customized integrated grow lighting solutions are available on request.

## Spectrum ScrogMaster Basic



## Technical specification SMB1140

Item	Value	Item	Value
Led diodes	SMD 3030	Led value	720 Watt
Led bars	4 pieces	Power factor	> 95%
Led wavelength	Full-spectrum	Power consumption	~ 330 Watt
Light distribution	120° beam angle	Dim control	0 – 100%
Lifespan	> 5 years	Voltage AC	100V – 277V
Height above plants	> 10cm   optimal 15cm	Work frequency	50Hz / 60Hz
Lighting area	0,70 to 1,70 m2	Working environment	-20 ~ + 40°C
PAR Photon flux	2,30 μmol / J	Waterproof level	IP65
ScrogMaster size	120*52*10 cm	Weight	8,5 Kg

## Certification and Warranty of ScrogMaster Basic Series



## Note:

1. Select different lighting time depending on plant species.
2. Don't look into the LED light directly without wearing sunglasses.
3. Power socket should be connected to the ground/earth.
4. The ScrogMaster Basic Series is CE, ELT and RoHS compliant.
5. Good after sales service; 3 year warranty.