



Horti Lightsystems

# Hortilight CMH Light System

Technical Specification

Release Version: V3.0

Release Date: 2018/02/15

Email: [info@hortilight.eu](mailto:info@hortilight.eu)

Address: Postbus 7530, 8903 JM, Leeuwarden, The Netherlands

## Main advantages Hortilight CMH Light System

### 1. High efficiency and Energy saving

CMH lighting is a very efficient way of plant lighting. Tests do show that CMH grow lights give plants greater light intensity and grow rates than standard HPS grow lights, yet using only 60% of the electricity.

### 2. Long life span

Ceramic MH bulbs do have a long lifespan. We advise to replace high pressure lighting bulbs when it's efficiency goes below 75% of the original light output. CMH bulbs do lighten 25.000 hours before it's efficiency goes below 75%. Compared to HPS the lifespan of CMH bulbs is 3 times more, because HPS bulbs do lighten 8.000 hours before it's efficiency is below 75% of the original light output.

### 3. Full Spectrum

CMH Light Systems do have a Full Spectrum light output. Lighting with a Full Spectrum CMH Lamp does give a natural feel, like day light, and does increase the health of plants (and animals). The yield is of better quality with more nutrients and vitamins.

### 4. Digital Ballast

Patented low frequency square wave digital ballast with soft start and comprehensive short-circuit overheat & lamp failure protection. Comes with remote control dimmable power output and PAR Plus boosting function.

### 4. PAR Plus

In PAR Plus modus the light output will be boosted to 700 Watt which will increase the PAR light output significant. In PAR Plus modus the temperature of the lamp and fixture will increase within its optimum limits.

### 5. Distance CMH to crop

There is a very simple and unique way to determine the minimum height of the reflector. Rule of thumb is that the shortest distance from reflector to crop is minimum half the distance between the other reflectors in a multi lamp set-up. It doesn't matter if the lamp is 315 Watt or 630 Watt. It's obvious that a 630 Watt lamp illuminates a larger surface than a 315 Watt lamp, automatically increasing distance between reflector and crop. A reflector hanging lower than calculated will increase hotspots and decrease uniformity. Lower is not always better!

### 6. CMH lamp

A Hortilight 630W CMH 3200K Double Ended lamp is included. The lamp has connector-pins on both ends of the bulb. These pins need to be properly locked in place in the sockets of the fixture.

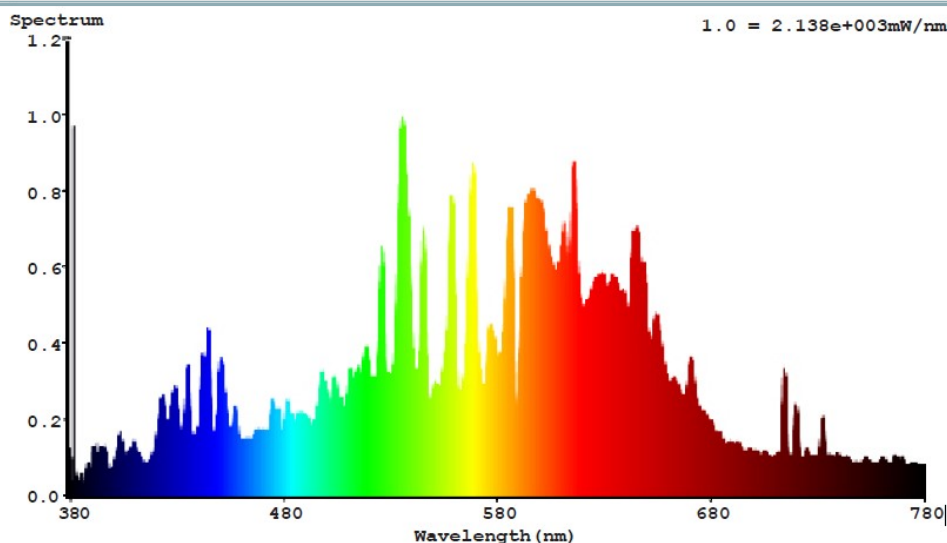
**NOTE: Because of quartz jacket, fingerprints and oil must be wiped off prior to operation!**

## Pictures of 630W Ballast & Fixture



1. A Hortilight CMH Light System is suitable for indoor and greenhouse lighting.
2. The 630W Ceramic MH does outperform a 1000W HPS / MH grow light.
3. Ideal for all phases of plant growth and works well in any garden, either hydroponics or soil based.
4. The Full Spectrum light output promotes plants photosynthesis.
5. OEM/ODM or customized integrated grow lighting solutions are available on request.

## 630W CMH 3200K - Full Spectrum light output



## Technical specification HL630CMH-DE

Item	Value	Item	Value
CMH / CDM series	630 Watt	Power output	250W, 400W, 630W
AC inrush current	Cold start 70A	PAR Plus output	700 Watt
Operating frequency	140 – 160 Hz	Power consumption	740 Watt (max.)
Trigger Voltage	6 KV (max.)	Light decay	< 10% / 20.000h
Voltage (output)	100V	Voltage (input)	120 – 250 Volt
Efficiency	> 91%	Work frequency	50Hz / 60Hz
Height above plants	> 0.40 meters	THD	< 6%
Working environment	-40 ~ + 50°C	Power Factor	> 99%
Photon flux density	1.224 $\mu\text{mol/s}$ @ 630W	N.W.	6.5 KG / pc
Size	555*370*150mm	G.W.	7.5 KG / pc

## Certification and Warranty of Hortilight CMH Light System



## Note:

1. Fingerprints and oil must be wiped off the lamp prior to operation!
2. Don't exceed maximum wire length of 20 meters between ballast & bulb.
3. Power socket should be connected to the ground/earth.
4. The CMH Light System is CE and RoHS compliant.
5. Good after sales service; 2 years warranty.