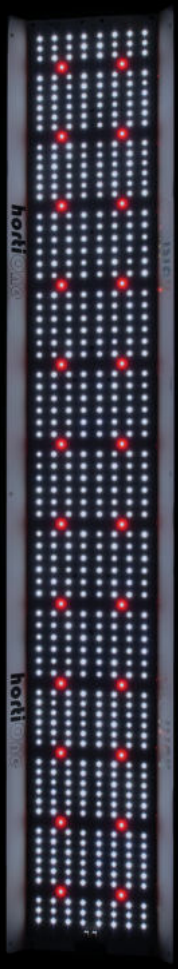
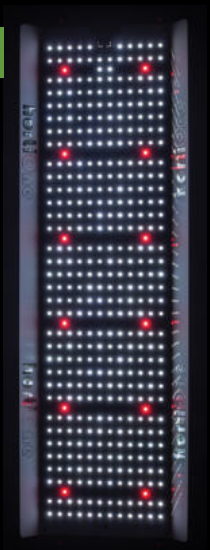
hortiOne

LED GROW LIGHTS

Catalog 2022



Growing Together



600

www.hortiOne.com

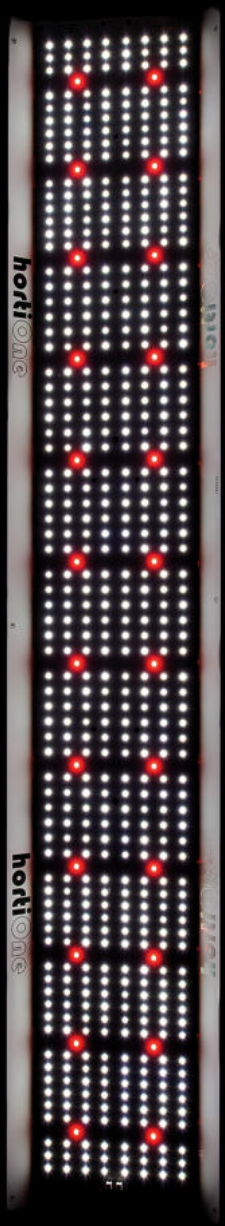
420

High light quality and efficacy at a low cost

2 YEAR WARRANTY · 45° ANGLED PANEL · PLUG AND PLAY · ROHS COMPLIANT · EXTRA LONG

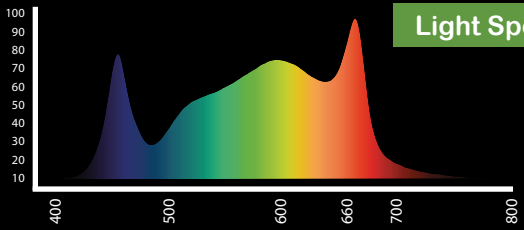
hortiOne 600

Extra-Long (940mm) and 45° angled LED Panel for indoor cultivation. The Reflector supports diffuse lighting, leading to increasing homogeneity and higher light output in your cultivation Area. Due to the length, a high level of uniformity can be reached in big areas. Hybrid construction with full-spectrum and high-performance MID-Power LEDs (3030C Plattform with 4000K) mixed with OSRAM High-Power LEDs (660nm) for good flowering results. Suitable for the vegetative and generative phases (full cycle). High light output for a small budget. Neutral white light for a real colour rendering and natural development of your plants.



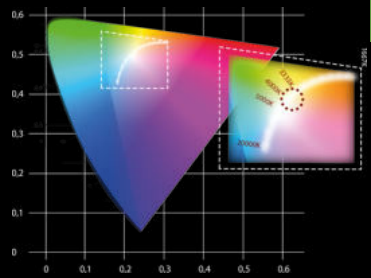
PHOTOSYNTHETIC PHOTON FLUX (PPF)	CONSUMPTION [W]	EFFICACY [µMOL/J]
600 µmol/s	220 W	2,9 µmol/J

Light Spectrum



Color Space

CIE 1976



hortiOne.com info@hortiOne.com . Gafadura 43, 6794 Partenen, Austria

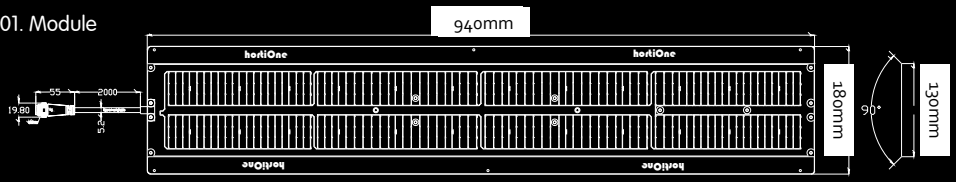
hortiOne

Consumption		220W
LEDs	576 x Seoul 3030C 4000K & 24 x OSRAM HP Giant 660nm	600 PCS
PPF (380-800nm)*		600 µmol/s
Efficacy		2.9µmol/J
Lifetime		50.000 H
CRI	Real color rendering	90
CTT* **	Neutral white	3,800 K
Voltage	Universal Input 110/230V	90-305 VAC
Operating Current		3.65A
Environmental Temperature		0-35 °C
Power Factor		> 94
Warranty		2 Y

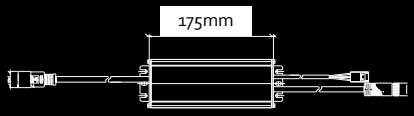
* Photosynthethic Photon Flux - Biological Photon Flux. ** Modul-Efficacy.
*** Correlated Color Temperature is derived from CIE 1931 Chromaticity diagram.

Dimensions

01. Module



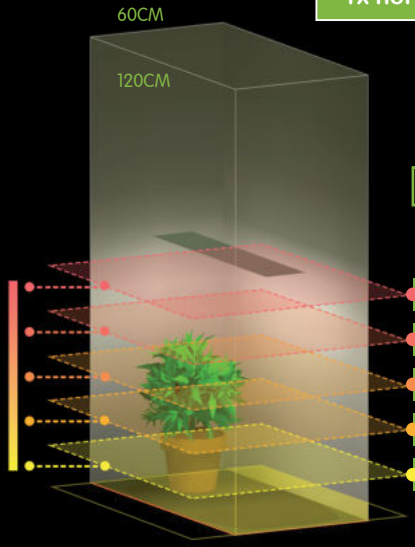
02. Driver



03. Box

Seedling	Veg	Flower
100-300 µmol/m²s	301-500 µmol/m²s	501-800 µmol/m²s

1x hortiONE 600 - 120x60cm (0,72m²)



CULTIVATION AREA

0,72m²

PHOTOSYNTHETIC PHOTON FLUX PPF

CONSUMPTION [W]

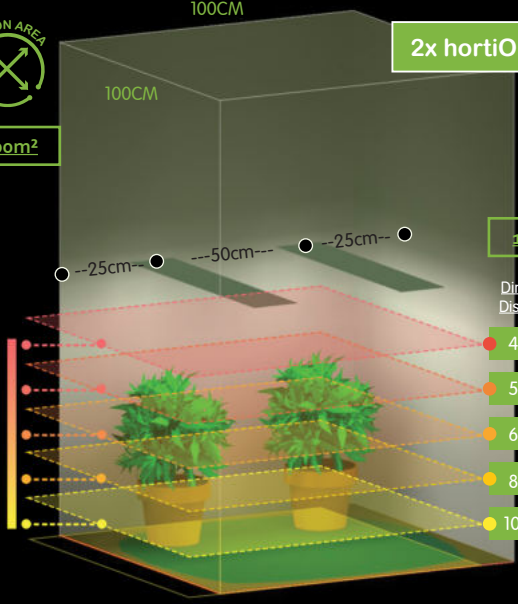
+/- HPS REPLACEMENT

600 µmol/s	220 watt	300 watt

Dimmer Distance	100%	80%	60%	40%	20%
40 cm	619	495	370	246	123
50 cm	530	423	315	206	102
60 cm	403	322	234	154	77
80 cm	293	234	176	118	59
100 cm	225	180	135	91	45

Average PPFD[µmol/m²s]

2x hortiONE 600 - 100x100cm (1,00m²)



CULTIVATION AREA

1,00m²

PHOTOSYNTHETIC PHOTON FLUX PPF

CONSUMPTION [W]

+/- HPS REPLACEMENT

1.200 µmol/s	440 watt	600 watt

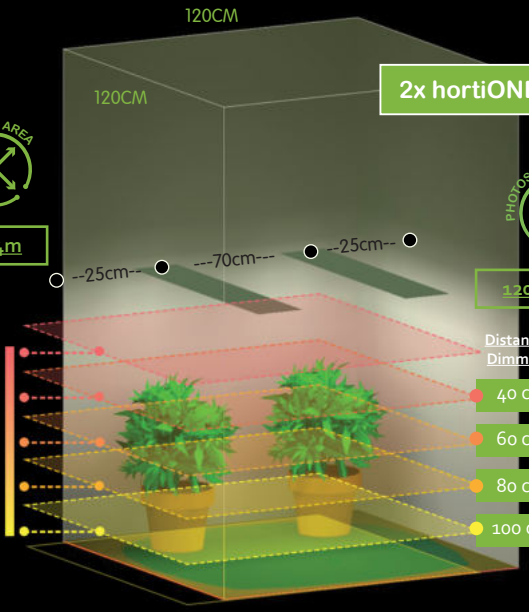
Dimmer Distance	100%	80%	60%	40%	20%
40 cm	936	749	560	360	180
50 cm	819	656	388	332	166
60 cm	644	516	493	361	131
80 cm	509	408	306	206	103
100 cm	404	323	243	164	82

Average PPFD[µmol/m²s]

hortiOne.com info@hortiOne.com . Gafadura 43, 6794 Partenen, Austria

hortiOne

2x hortiONE 600 - 120x120cm (1,44m²)



CULTIVATION AREA: 1,44m

PHOTOSYNTHETIC PHOTON FLUX PPF: 1200 µmol/s

CONSUMPTION [W]: 440 watt

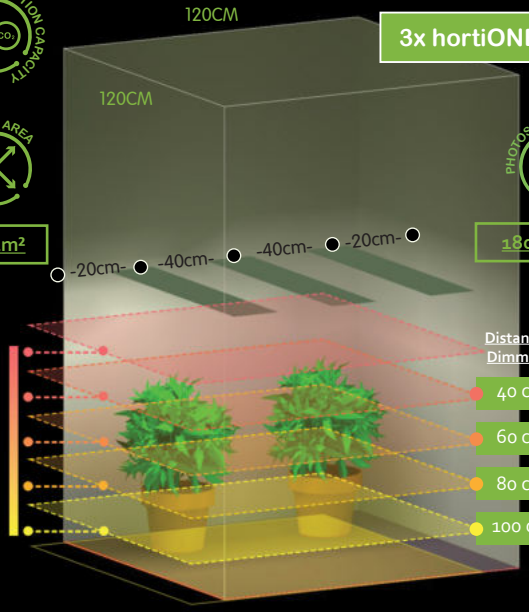
+/- HPS REPLACEMENT: 600 watt

Distance Dimmer	100%	80%	60%	40%	20%
40 cm	633	505	377	312	124
60 cm	513	410	308	257	104
80 cm	428	338	254	212	84
100 cm	346	277	208	173	70

Average PPFD[µmol/m²s]

3x hortiONE 600 - 120x120cm (1,44m²)

HIGHER ABSORPTION CAPACITY



CULTIVATION AREA: 1,44m²

PHOTOSYNTHETIC PHOTON FLUX PPF: 1800 µmol/s

CONSUMPTION [W]: 660 watt

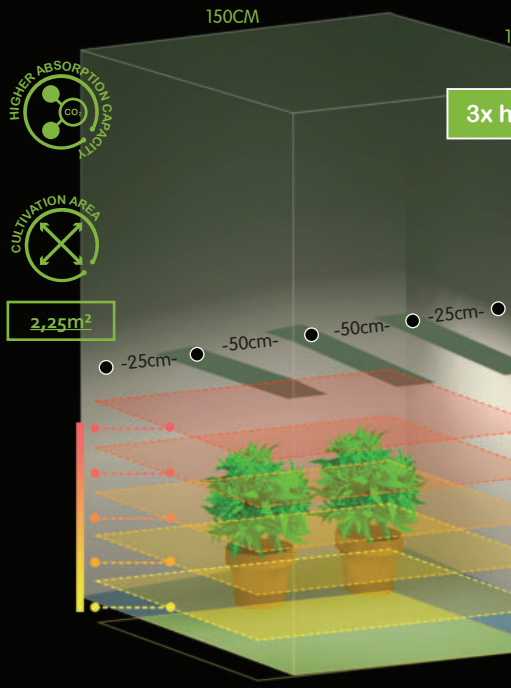
+/- HPS REPLACEMENT: 1000 watt

Distance Dimmer	100%	80%	60%	40%	20%
40 cm	927	742	555	367	182
60 cm	767	614	460	307	153
80 cm	627	501	376	251	125
100 cm	529	407	305	203	102

Average PPFD[µmol/m²s]

hortiOne.com info@hortiOne.com . Gafadura 43, 6794 Partenen, Austria

hortiOne



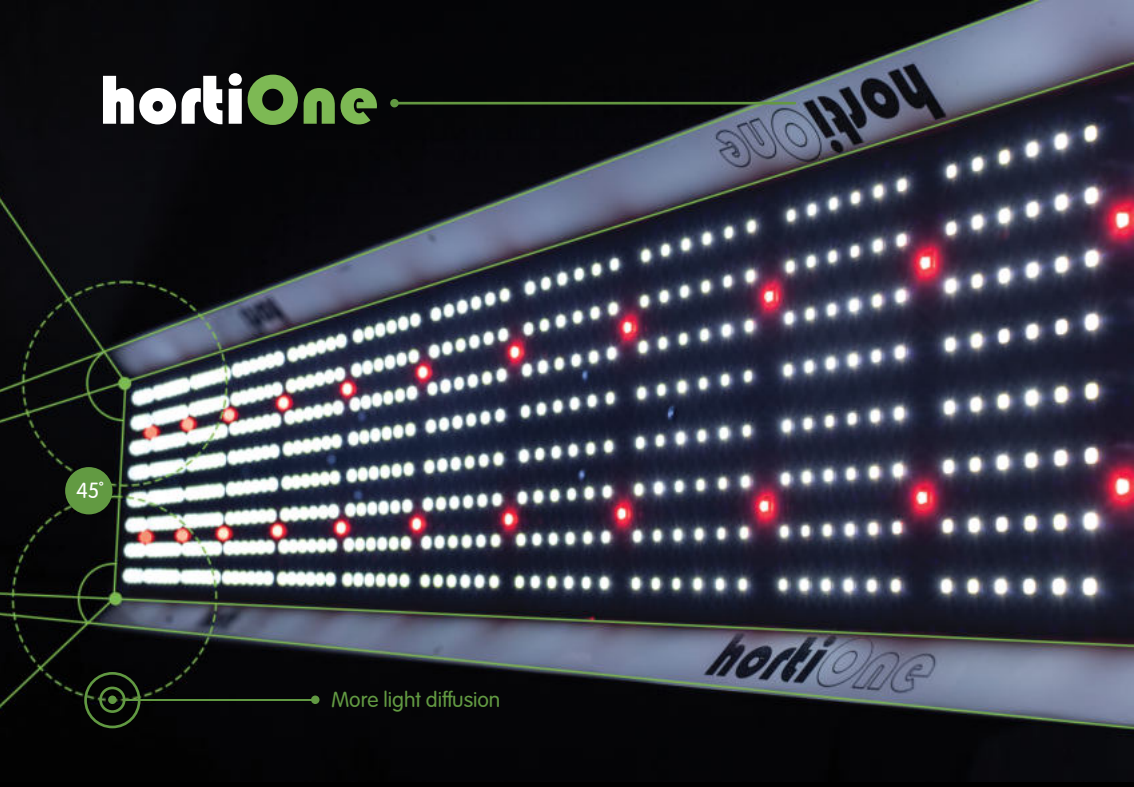
3x hortiONE 600 - 120x120cm (1,44m²)

CULTIVATION AREA	PHOTOSYNTHETIC PHOTON FLUX PPF	CONSUMPTION [W]	+/- HPS REPLACEMENT
2,25m²	1800 µmol/s	660 watt	1000 watt

Distance / Dimmer	100%	80%	60%	40%	20%
40 cm	927	589	441	294	146
60 cm	602	479	441	293	118
80 cm	496	397	358	198	99
100 cm	416	333	250	166	83

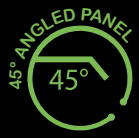
Average PPFD[µmol/m²s]

hortiOne



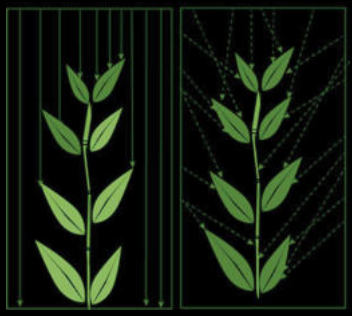
The angled panel causes a more diffuse light distribution and thus ensures

- Higher Uniformity
- Higher light intensity in the cultivation area (2-5 % in higher PPFD)
- Higher stability for the long LED panel
- Improved Depth penetration



Light Diffuser

Angled reflector plate with 45 ° for better light distribution



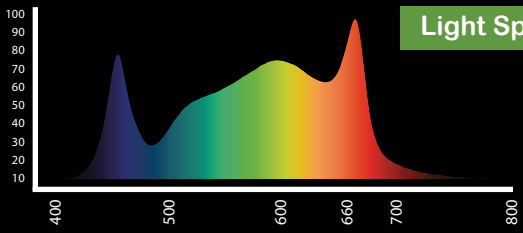
hortiOne.com info@hortiOne.com . Gafadura 43, 6794 Partenen, Austria

2 YEAR WARRANTY · 45° ANGLED PANEL · PLUG AND PLAY · ROHS COMPLIANT

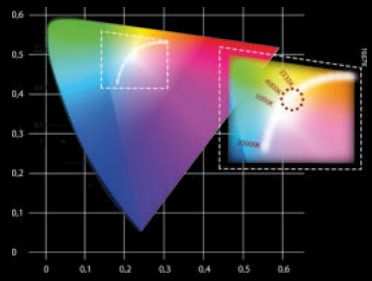
hortiOne 420

45° angled LED panel for indoor cultivation. The reflector supports diffuse lighting, leading to increasing homogeneity and higher light output in your cultivation Area. Hybrid construction using only high-quality components with full-spectrum and high-performance MID-Power LEDs (Seoul 3030C with 4000K) mixed with OSRAM giant high-power LEDs (deep-red: 660nm) for good flowering results. Suitable for the vegetative and generative phases (full cycle). High light output for a small budget. Neutral white light for a real colour rendering and natural development of your plants. Very high durability, longevity and chemical resistance against VOCs and sulfur.

PHOTOSYNTHETIC PHOTON FLUX (PPF)	CONSUMPTION [W]	EFFICACY [µMOL/J]
408 µmol/s	150 W	2,9 µmol/J

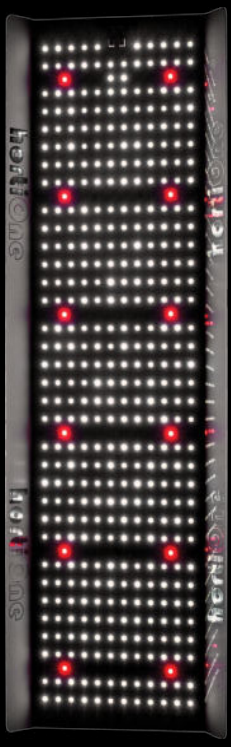


Light Spectrum



Color Space

CIE 1976



hortiOne.com info@hortiOne.com . Gafadura 43, 6794 Partenen, Austria

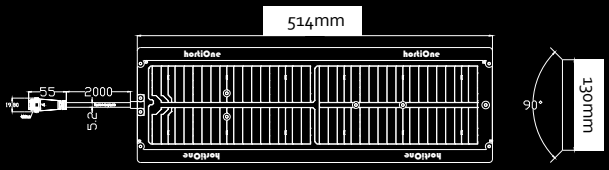
hortiOne

Consumption		150W
LEDs	408 x Seoul 3030C 4000K & 12 x OSRAM HP Giant 660nm	420 PCS
PPF (380-800nm)*		408 µmol/s
Efficacy		2.9µmol/J
Lifetime		50.000 H
CRI	Real color rendering	90
CTT* **	Neutral white	3,800 K
Voltage	Universal Input 110/230V	90-305 VAC
Operating Current		2.6A
Environmental Temperature		0-35 °C
Power Factor		> 94
Warranty		2 Y

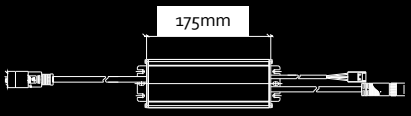
* Photosynthetic photon flux - Biological photon flux. ** Module-Efficacy.
*** Correlated color temperature is derived from the CIE 1931 chromaticity diagram.

Dimensions

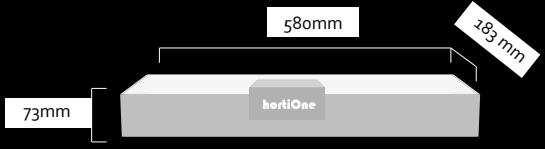
01. Module



02. Driver



03. Box

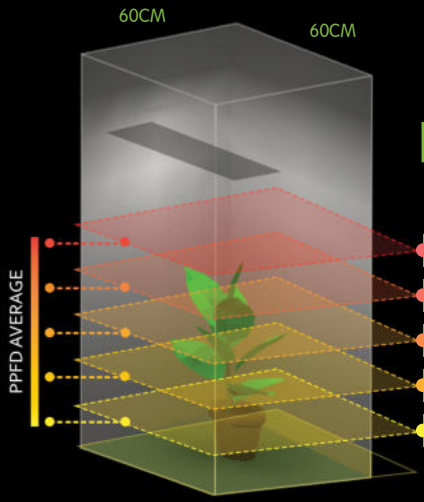


Seedling	Veg	Flower
100-300 µmol/m²s	301-500 µmol/m²s	501-800 µmol/m²s

1x hortiONE 420 - 60x60cm (0,36m²)

CULTIVATION AREA

0,36m²



PHOTOSYNTHETIC PHOTON FLUX PPF: 408 µmol/s

CONSUMPTION [W]: 150 watt

+/- HPS REPLACEMENT: 315 chm

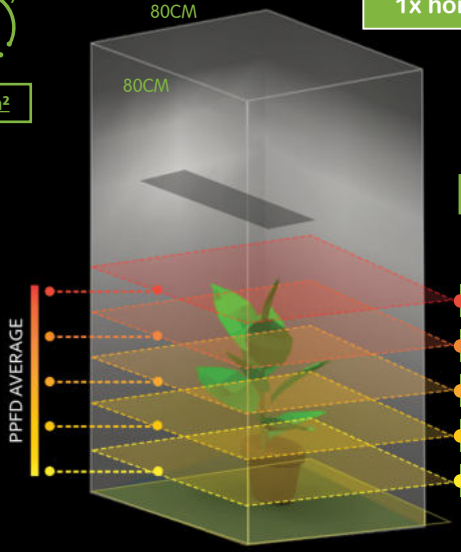
Dimmer Distance	100%	80%	60%	40%	20%
30 cm	938	750	562	376	189
40 cm	744	592	447	299	150
60 cm	494	396	297	198	99
80 cm	328	262	197	132	66
100 cm	235	188	141	94	47

Average PPFD[µmol/m²s]

1x hortiONE 420 - 80x80cm (0,64m²)

CULTIVATION AREA

0,64m²



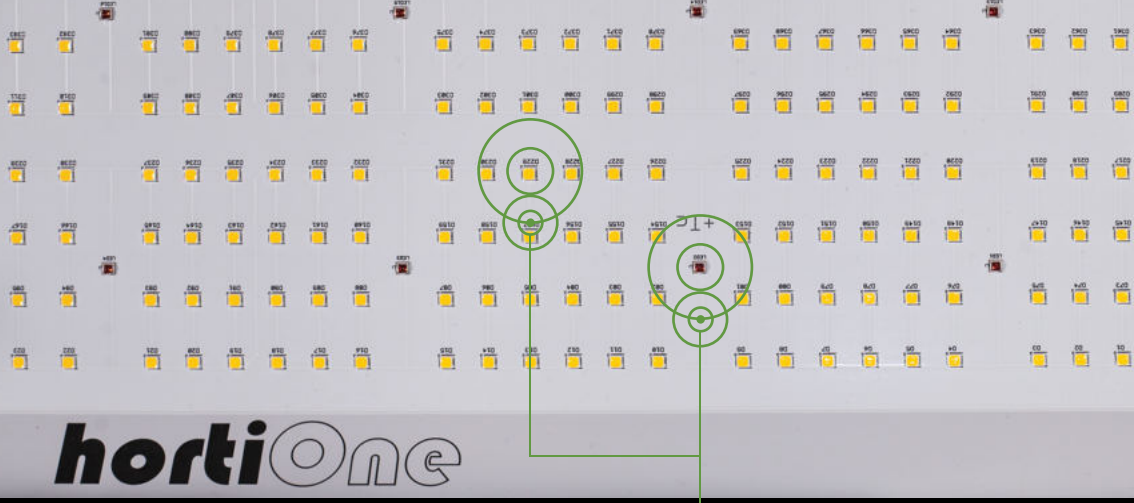
PHOTOSYNTHETIC PHOTON FLUX PPF: 408 µmol/s

CONSUMPTION [W]: 150 watt

+/- HPS REPLACEMENT: 315 chm

Dimmer Distance	100%	80%	60%	40%	20%
30 cm	731	585	439	292	146
40 cm	531	423	318	212	106
60 cm	381	305	229	153	76
80 cm	284	227	170	114	57
100 cm	213	170	128	85	43

Average PPFD[µmol/m²s]



Performance, Durability and Chemical Resistance

Numerous Factors cause LED-Systems to degradate. VOCs (Volatile Organic Compounds) is one main cause. Some of them also contain sulfur and are called Sulfur-containing Volative Organic Compunds) S-VOC. Furthermore, is Sulfur considered a corrosive material which can damage the electronic or LED-Chip. Almost every LED-chip manufacturer claims special caution in environments with a high amount of chemical substances and especially sulfur.

Why Seoul 3030C?

Besides the industry-leading photosynthetic photon efficacy (PPE) of 3.1 µmol/J, the Seoul 3030 Series offers the highest sulfur resistance and reliability on the market today. This is achieved by an innovative packaging of the led chips.

Only top components (very high efficiency & durability) Seoul 3030C, OSRAM HP

Chips-LEDs with the highest resistance against VOCS (Volatile Organic Compounds) like Sulfur, Tempereature and humidity

More about this topic

Here is some information about the tests we have carried out with very clear results.

hortiOne.com info@hortiOne.com . Gafadura 43, 6794 Partenen, Austria

hortiOne

PLUG AND PLAY

BLUETOOTH COMPATIBLE

CONTROL BY THE APP

DIMMABLE - TOTAL CONTROL

DIMMER

Knob + Bluetooth

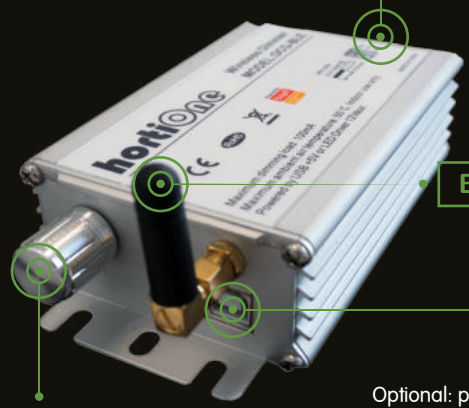
(DCG-BLE)

horitONE Dimmer Knob & Bluetooth can simultaneously control up to 3 LED drivers. hortiONE 420 / 600 models are plug & play. The supply voltage comes either directly from a driver with 12V AUX. If this is not available, a USB charger with USB-A interface can be used. Thus, the dimmer is compatible with all 0-10V dimmable drivers. Included are 3 cables for hortiONE LED. These can optionally be removed and all compatible drivers can be connected (DiY). There are 3 function modes: 1. KNOB, 2. Bluetooth (Directly from smartphone to dimmer) with timing and Sunrise / Sunset function. 3. Bluetooth with gateway (Smart) so the dimmer can be controlled via a cloud and also connected to external sensors.

Powered by tuya Intelligence Inside

Connection for 3 LED drivers

Plug & Play for hortiONE 420 / 600 compatible with 0-10V dimmable driver



Bluetooth antena

App Controll

USB-Type B

Optional: power supply for driver without 12V AUX

Knob

Modes:

Off - 20% - 40% - 60% - 80% - 100%

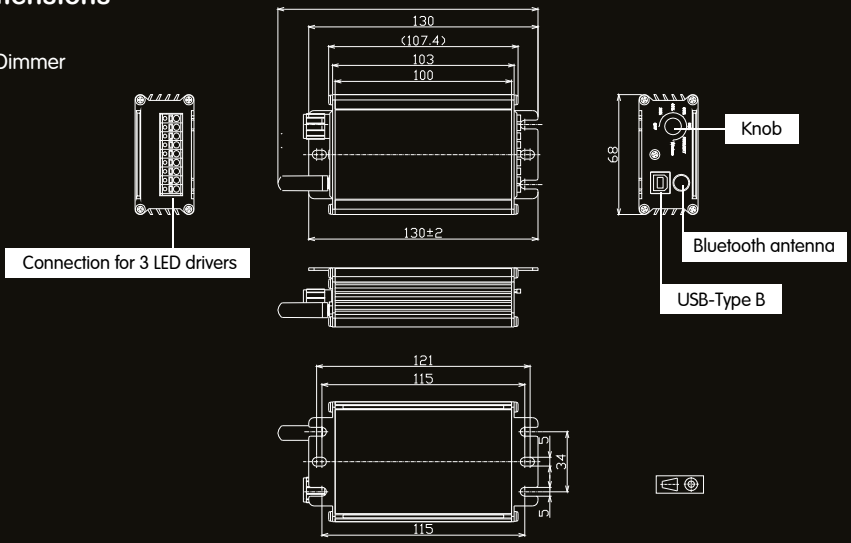
Wireless (Bluetooth)

TECHNICAL DATA

Input	LED driver 12V AUX or powered by USB +5V	
Output		0-10 VDC
Maximum dimming load		100 mA
Channel		1
Number of connections	Can connect up to 3 LED driver	3
Max ambient air temperature	Indoor use only	50 °C
Warranty		2 years
Dimensions		130x68x34 mm

Dimensions

01. Dimmer



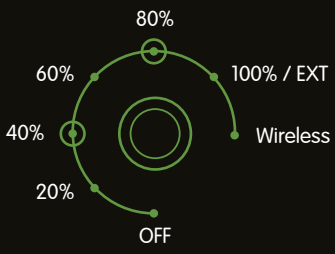
02. Wire

940mm

hortiOne

01. Knob-dimming

When the knob is used for dimming, the bluetooth chip is deactivated and not powered!



Output power is x % of maximum

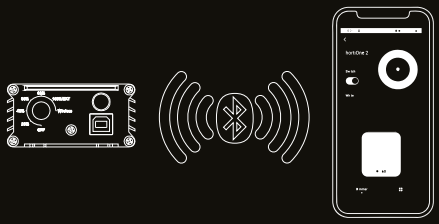
Modes

- OFF : Dimm off
- 20%
- 40%
- 60%
- 80%
- 100%
- Wireless: Bluetooth mode

02. Bluetooth direct

Power Off / Power On
Stepless dimming from 1-100%
Schedules: (daily light on / off)
Sunrise / sunset function

The connection is soley between the dimmer and the smartphone.
Both units must be inside the signal range.
Distance is depending on the environment

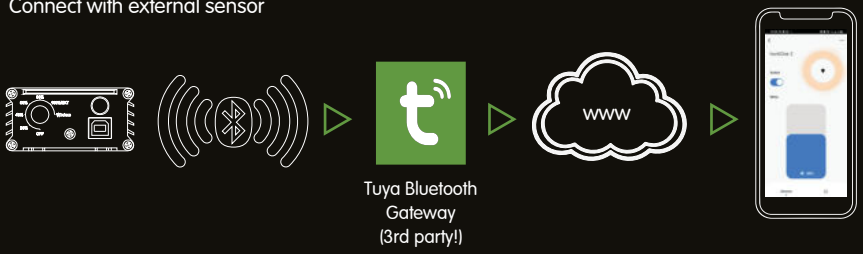


Download tuya smart app (Android and Apple)

Scan QR-Code on the side or search for "Tuya smart" app

03. Bluetooth smart (requires Gateway!)

Controll your grow light via Internet - Connect with external services (Alexa, Google,..)
Connect with external sensor



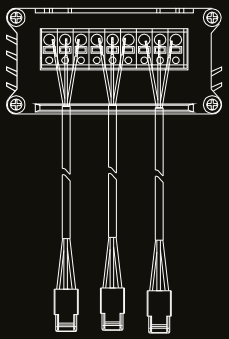
Tuya Bluetooth
Gateway
(3rd party!)

CO2 sensor | **Light sensor** | **Humidity / Temperature sensor**

You can monitor sensor values in the same app. These values can also be used to control your LED grow light. Samples: Increase light intensity when the C02 value is above *** ppm (a defined level)
Note: The required gateway and sensors are 3rd party components and not provided by hortiONE

Connection

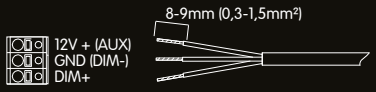
hortiONE 420 / 600



Connect to your hortiONE 420/600
LED GROW LIGHT (plug n play)

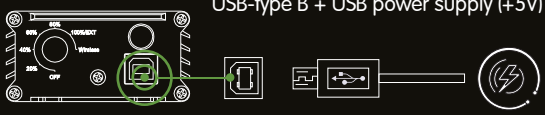
3rd Party LED driver (including 12V AUX port)

0/1-10V dimmable LED driver only!



3rd Party LED driver (USB power supply)

USB-type B + USB power supply (+5V)



01. Connect the dimmer to your LED driver

The LED driver must be connected to electricity (AC outlet).
hortiONE 420 and hortiONE 600 are plug n play. If you use a hortiONE V1/ V2 or a 3rd party LED driver without 12V AUX connection, a separate USB power supply (Type B) must be used. If more than one LED-driver is conncted, only one of them must have a 12V AUX port as power source.

02. Set the knob to wireless

The connected LED grow light will flash one time

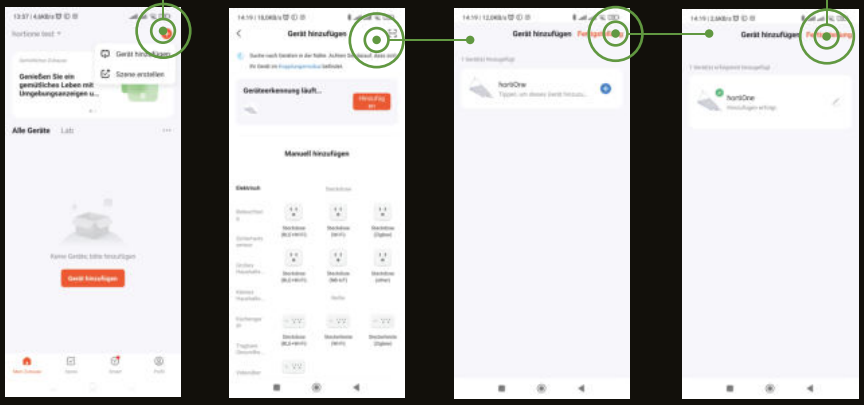
03. Open tuya app and add the dimmer

Scan the QR-Code on the first page or search for "Tuya Smart" in your app store.
Start tuya app. Bluetooth must be activated!

Press the (+) and add device or use the orange button: Add device

The Dimmer should be found automatically
1. Click Add device
2. Click on the (+)

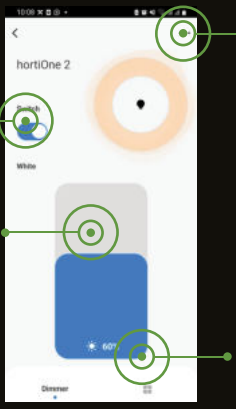
Click on "Finalize"

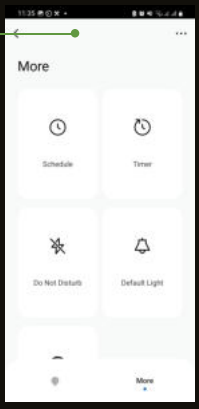


Using the app

Power On
Power Off

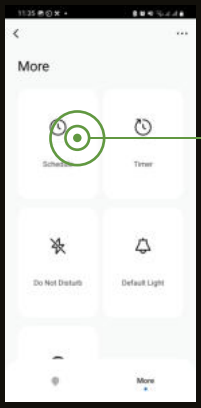
Stepless Diming 1 - 100%

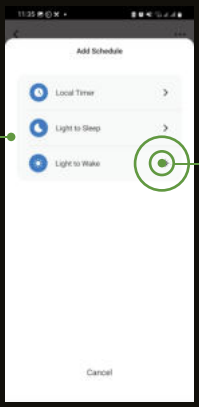


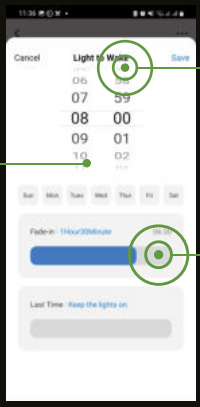


See next Section:
Timer
Sunrise / Sunset

Setting up a timer - Sunrise / Sunset



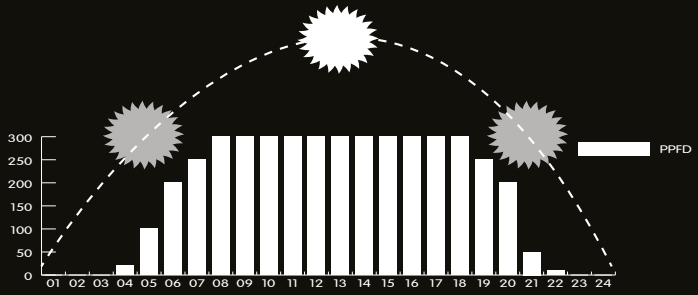




Set start time!

Set fade-In (Sunrise)
Up to 2 hours

Repeat this with Time to sleep to setup the Illumination period and sunrise period



hortiOne

LED GROW LIGHTS

www.hortiOne.com