



Our new ballasts have an increased efficiency up to 30%



Highest reflector efficiency in the horticultural industry!





# EXPERT SERIES MKII



The MKII upgrade is a more efficient, functional and smarter light fixture.

Because the electronics produce less heat, the ballast housing is more compact, the ballast is even more efficient, lighter, and smarter.

The MKII upgrade is a more efficient, functional and smarter light fixture. Because the electronics produce less heat, the ballast housing is 30% shorter.

For example, the Dimlux Expert 1000W MKII has the same length as the Dimlux Expert 600W.



# 8 DIM OPTIONS WITH 2 SPECIAL "BOOSTS"

Status and alarms will be displayed on this display. The DimLux Expert Series MKII ballast achieves the highest possible light output due to the overdrive technology (boost). This makes it possible to get a higher percentage light output.

Single push button for setting the power output:

**Dimlux Expert 600/750W** in steps of 320, 390, 460, 530, 600, 660, 720W.

**Dimlux Expert 1000W** in steps of 500, 600, 700, 800, 900, 1000, 1100, 1200W.

**Dimlux Expert 1000/1250W CA** in steps of 500, 600, 700, 800, 900, 1000, 1100, 1250W.

# EASY CONNECTIVITY BY USING SMARTPORTS

The Dimlux Expert MKII is equipped with an extra interconnect port (Smartport) that can be used universally.

#### **DIMLUX SENSORS**

Another ballast can be connected to the Dimlux Expert MKII, but also, for example, a plant temperature camera or humidity sensor.

# MORE EFFICIENT, MORE FUNCTIONAL, MORE COMPACT, LIGHTER & SMARTER!



# EASY REMOVABLE ULTRA OPTICS REFLECTOR

Standard equipped with the Ultra Optics Hybrid 98 reflector. This reflector has the highest reflector efficiency in the market with 98% total efficiency,

achieved through Miro 98 (99.99% silver) and the SBCS (Single Bounce Clear Sight) principle.

Easy to replace with the Ultra Optics Wide 98 reflector or Ultra Optics Deep 98 reflector. Both reflectors have a 98% efficiency just like the Ultra Optics Hybrid 98.

The main goal in designing the Ultra Optics Reflector was to achieve the highest efficiency (light output) possible. It's designed according to the SBCS (Single Bounce Clear Sight) principle which means that each light ray reflects only a single time in the reflector before exiting (Single Bounce). After reflection, the beam is not hindered by the lamp or other parts (Clear Sight).

The design of the reflector is optically perfect so that no hammered or textured pattern is needed to spread hotspots. Hammered or textured reflective reflectors are made to improve uniformity, but create undesirable multiple reflections inside the reflector and cause reflections from the reflector to the lamp causing a decrease in efficiency. The techniques used in our reflector combined with the use of Miro Silver mirror will provide unparalleled results.





# ALL EXPERT MKII FIXTURES ARE FITTED WITH OUR NEW DXO BULBS!

# THE ONLY BULB IN THE WORLD TO MEET THE HORTICULTURAL LIGHTING MINIMUM EFFICACY 2022 (2023) CALIFORNIA ENERGY CODE





The new 1000/1250W MKII DE EL UHF DXO California Spec is ready\* for the 2022 (2023) California Energy Code that requires a minimum photosynthetic photon efficacy (PPE) of  $2.1 \mu Mol/J$  for fixtures in indoor growing facilities with more then  $1,000 ft^2$  of canopy.

The DXO CA spec lamp was developed with one goal in mind, to be the most efficient lamp ever made and, together with the Dimlux Expert Series MKII 1000W fixture, to be the only in the world to comply with the 2022 California Energy Code.

The new MKII fixture together with the new DXO CA spec lamp is the only combination in the world to have a system efficacy (PPE) of more than 2.1 µmol/J, an unprecedented achievement that was thought to be impossible. Most competing brands barely reach the 1.8 µmol/J, and only a few reach 1.9 µmol/J.

## 95% PAR MAINTENANCE AFTER 10.000H OPERATION!

The extremely high PAR output and high PAR maintenance provide the best in class grow light and set a new benchmark for all EL bulbs. The bulb produces light mostly in the orange/red part of the spectrum for heavy flowering however, it does produce some light in the blue part of the spectrum making it suitable for vegging.

By using the most efficient techniques and latest development, the DXO range has an extremely long life and PAR Maintenance of >95% after 10,000 burning hours.

# THE FIRST CHOICE FOR PROFESSIONAL HORTICULTURALISTS

It's targeted for professional horticulturalists in the commercial food growing industry, which is largely down to its ability to pile on weight during the bloom phase. It has been specifically designed to make the most of your HPS electronic system with boost where it will produce more plant-useable light photons, of a better spectrum, than any other bulb available.

We are setting a new standard in the industry with our new generation of MKII HPS fixtures and the introduction of a range of Dimlux Xtreme Output (DXO) bulbs.

#### DXO/CA



## DIMLUX XTREME OUTPUT HPS 400V 1000/1250W DE EL

System Light Output PAR (PPF 400-700nm) 2725µmol/s @1250W

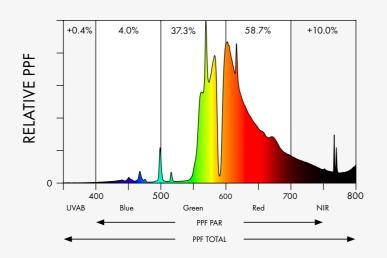
System Light Output PAR Total (PPF 350-800nm) 2997µmol/s @1250W

System Photon Efficacy PAR (PPE 400-700nm)

2,18µmol/J@1150-1250W

System Photon Efficacy PAR Total (PPE 350-800nm)

2,39µmol/J @1150-1250W







## DIMLUX XTREME OUTPUT HPS 400V 600/750W EL

System Light Output PAR (PPF 400-700nm) 1536µmol/s @750W

System Light Output PAR Total (PPF 350-800nm)

1690µmol/s @750W

System Photon Efficacy PAR (PPE 400-700nm)

2,04µmol/J @700-750W

System Photon Efficacy PAR Total (PPE 350-800nm) **2,24µmol/J @700-750W** 





## DIMLUX XTREME OUTPUT HPS 400V 1000/1250W DE EL

System Light Output PAR (PPF 400-700nm)

2725µmol/s @1250W

System Light Output PAR Total (PPF 350-800nm)

2997µmol/s @1250W

System Photon Efficacy PAR (PPE 400-700nm)

2,18µmol/J@1150-1250W

System Photon Efficacy PAR Total (PPE 350-800nm) 2,39µmol/J @1150-1250W





# **DIMLUX**



#### **FEATURES**

- Unparalleled and highly efficient ballast driver:
   97% efficiency, 30% less losses, lighter, and 30% more compact than the old Dimlux Expert Series 1000W.
- Standard equipped with the Ultra Optics Hybrid 98 reflector. This reflector has the highest reflector efficiency in the market with 98% total efficiency.
- Single push button for setting the power output

**Dimlux Expert 1000/1250W CA** in steps of 500, 600, 700, 800, 900, 1000, 1100, 1250W.

**Dimlux Expert 1000W** in steps of 500, 600, 700, 800, 900, 1000, 1100, 1200W.

**Dimlux Expert 600/750W** in steps of 320, 390, 460, 530, 600, 660, 720W.

- 4-Character status display with scrolling text. Status and error codes are fully displayed on this display.
- Closed ballast design, for better protection of the electronics.
- Controllable with current Maxi Controller and the upcoming Smart Protocol platform.

# EXPERT SERIES 600/**750W MKII**



#### **SPECIFICATIONS**

# DIMLUX EXPERT SERIES 600/750W MKII EL UHF DXO

#### Dimlux Xtreme Output HPS 400V 600/750W EL Bulb

Light Output PAR (PPF 400-700nm)	1506µmol/s @750W
Light Output PAR Total (PPF 350-800nm)	1657µmol/s @750W
System Photon Efficacy PAR (PPE 400-700	Onm) 1,94µmol/J @700-750W
System Photon Efficacy PAR Total (PPE 350	2,13μmol/J @700-750W
Voltage	230V ±10V
Power consumption @600W	616W 2.7A at 230V
Power consumption @750W	770W, 3.4A at 230V
Illumination surface @600W	min. 0.78m² (8.39ft²), max. 2m² (21.52ft²)
Illumination surface @750W m	in. 0.95m² (10.22ft²), max 2.4m2 (25.83ft²)
Dim levels Soft-Off, 320W, 390	OW, 460W, 530W, 600W, 650W, 750W
Input Frequency	50/60Hz
Power Factor	0.99
Ultra high frequency (UHF)	Yes
Controller	Maxi Controller
Dimensions	550x275x130mm (21.6x10.8x5.1")
Weight	5.1 kg (11.24lbs)

### EXPERT SERIES 1000W MKII



#### **SPECIFICATIONS**

# DIMLUX EXPERT SERIES 1000W MKII DE EL UHF DXO

#### Dimlux Xtreme Output HPS 400V 1000/1250W DE EL Bulb

Light Output PAR (PPF 400-700nm)	2558µmol/s @ 1200W
Light Output PAR Total (PPF 350-800nm)	2813µmol/s @1200W
System Photon Efficacy PAR (PPE 400-700)	nm) 2,07µmol/J@1150-1200W
System Photon Efficacy PAR Total (PPE 350	-800nm) <b>2,27µmol/J@1150-1200W</b>
Voltage	230V ±10V
Power consumption @ 1000W	1035W 4.5A at 230V
Power consumption @ 1200W	1242W, 5.4A at 230V
Illumination surface @ 1000W	min 1.4m² (15.06ft²), max 3.3m² (35.52ft²)
Illumination surface @ 1200W	min 1.65m² (17.76ft²), max. 4m² (43.05ft²)
Dim levels Soft-Off, 600W, 700W,	800W, 900W, 1000W, 1100W, 1200W
Input Frequency	50/60Hz
Power Factor	0.99
Ultra high frequency (UHF)	Yes
Controller	Maxi Controller
Dimensions	625x275x130mm (24.6x10.8x5.1")
Weight	6,3kg (13.88lbs)



#### **SPECIFICATIONS**

#### DIMLUX EXPERT SERIES 1000/1250W MKII EL UHF DXO CALIFORNIA SPEC

#### Dimlux Xtreme Output California Spec HPS 400V 1000/1250W DE EL

Light Output PAR (PPF 400-700nm)	2724µmol/s @ 1250V
Light Output PAR Total (PPF 350-800nm)	3008µmol/s @1250W
System Photon Efficacy PAR (PPE 400-70	Onm) 2,12µmol/J @1100-1250W
System Photon Efficacy PAR Total (PPE 35	iO-800nm) <b>2,34µmol/J@1100-1250W</b>
Voltage	230V ± 10 <sup>v</sup>
Power consumption @ 1000W	1035W 4.5A at 230°
Power consumption @ 1250W	1250W, 5.6A at 230 <sup>1</sup>
Illumination surface @ 1000W	min 1,4m² (15,06ft²), max 3,3m² (35,52ft²
Illumination surface @ 1250W	min 1,65m² (17,76ft²), max. 4m² (43,05ft²
Dim levels Soft-Off, 600W, 700V	V, 800W, 900W, 1000W, 1100W, 1250W
Input Frequency	50/60Hz
Power Factor	0.99
Ultra high frequency (UHF)	Ye
Controller	Maxi Controlle
Dimensions	625x275x130mm (24.6x10.8x5.1*
Weight	6,3kg (13.88lbs



# GOING WHERE NO BULB HAS EVER GONE BEFORE!

MADE TO BOOST



**Dimlux** Xtreme Output



DXO/C



>95% PAR MAINTENANCE AFTER

10.000

Burning hours



THE ONLY BULB IN THE WORLD TO MEET THE HORTICULTURAL LIGHTING MINIMUM EFFICACY 2022 (2023) CALIFORNIA ENERGY CODE\*

\*To meet the new requirement the new DXO (Dimlux Xtreme Output) CaliSpec bulb needs to be used in combination with the Dimlux Expert 1000/1250W MKII

