



## SUITABLE LAMPS

The Nanolux DE 1000W and 600W ballasts are designed and tested to drive double ended High Pressure Sodium (HPS) Electronic lamps. Using regular 1000W and 600W HPS lamps can cause damage to your ballast and lamp.



## WARRANTY

Nanolux Technology warrants the mechanical and electronic components of this product to be free of defects in material and workmanship if used under normal operating conditions for a period of three (3) years from the original date of purchase. If the product shows any defects within this period and that defect is not due to user error or improper use Nanolux Technology shall, at its discretion, either replace or repair the product using suitable new or refurbished parts. In case Nanolux decides to replace the entire product, this limited warranty shall apply to the replacement product for the remaining initial warranty period, i.e. three (3) years from the date of purchase of the original product. For service return the ballast to your shop with the **original sales receipt**.

For more information about Nanolux product please visit [nanoluxtech.com](http://nanoluxtech.com)



**PATENTED PRODUCTS, COUNTERFEITING NOT ALLOWED.**

Designed by NANOLUX in California  
Made in China

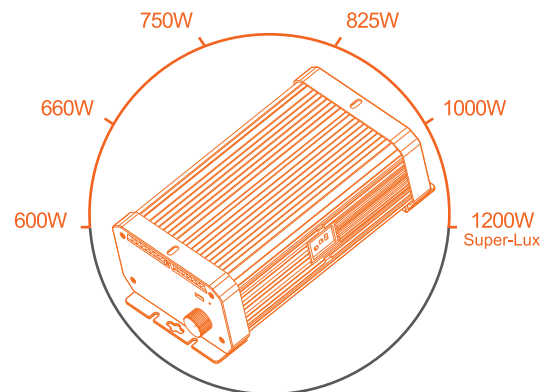
# OPERATING MANUAL

DIGITAL ELECTRONIC

## BALLAST

**SUPER DE 1000W/600W**

NCCS APP COMPATIBLE



ADJUSTABLE  
POWER+  
SOFT DIM

**NANOLUX** DE  
[www.nanoluxtech.com](http://www.nanoluxtech.com)  
*Illuminating Your Grow*



## PLEASE READ INSTRUCTIONS FIRST BEFORE INSTALLATION

Congratulations on the purchase of your new Nanolux DE 1000W and 600W ballast. We have done everything to insure a long life and safe operations, but the installations and use of the ballast is the responsibility of the user. Incorrect use or installations can lead to failure and damage to the ballast. Damage to the ballast and electronic circuitry as a result of incorrect installations and use revokes your warranty. Read this manual carefully before installing your ballast.



## TECHNICAL SPECIFICATIONS

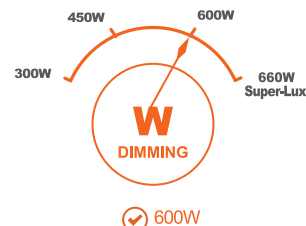
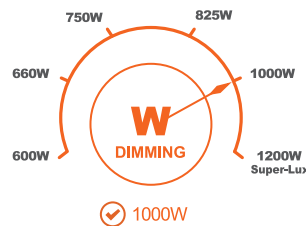
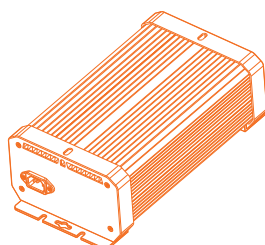
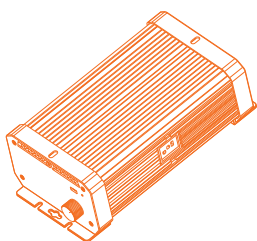
Model	1000W	600W
Input Voltage	120V/208V/240V	
Output Voltage	200V-300V	70V-150V
Input Frequency	50/60Hz	50/60Hz
Output Power	1200W Max	660W Max
Power Factor	≥0.99	≥0.99
Crest Factor	≤1.7	≤1.7
THD	≤10%	≤10%
Dimming	600W-660W-750W-825W-1000W -1200W(Super-Lux)	300W-450W-600W -660W(Super-Lux)
Strike Lamp	Double Ended Lamp	Double Ended Lamp
Output Frequency	100KHz - 200 KHz	30KHz - 80KHz
Protection Function	Over Temperature Protection; Over/Under Voltage Protection; Open/Short Circuit Protection;	
Size (L*W*H)	320*167*104mm 12.6*6.6*4.1inch	214*167*104mm 8.4*6.6*4.1inch
Weight	4.7 kgs 10.4 lbs	3.1 kgs 6.8 lbs



## PRODUCT DESCRIPTION

The Nanolux DE ballast 1000W and 600W are state of the art adjustable horticultural quality ballast. They are designed to drive the 1000W and 600W Double Ended electronic high frequency HPS lamps. Professional electronic HPS lamps operate at very high frequency to prevent acoustic resonance and to optimize lamp life. The NCCS App system is also incorporated.

The fanless luminaire housing is sealed. The housing allows warm air to exit the housing, cool air to enter the housing when cooling down while preventing dust and moisture to enter.



## SCOPE OF USE

The Nanolux DE ballasts are designed to drive horticultural high frequency HID lamps for plant cultivation. They are intended for climate room use, where it can be mounted in the climate room, or outside the climate room on a suitable non-compostable surface. The DE fanless ballasts are sealed to prevent any dust or moisture from entering the housing. They are suitable for a damp location but should not be used in wet environments or outdoors. FOR INDOOR USE ONLY.



## INSTALLATION

**Be sure to comply with local installation and regulations.**

Always install electronic ballasts vertically, so the air can rise the ribs for optimal cooling. The lamp and reflector will be hot during operation, DO NOT touch the reflector or lamp during or right after operation.

Make sure the power cord do not connect any hot part of the ballast. Keep at least a 2 inches distance between individual ballast to insure free air flow. Only mount ballasts on a non-combustible material.

The temperature of the electronics is the most important parameter for lifetime and reliability. A normal operating environment temperature should be below 122°F. Exceeding the maximum environment temperature will stress the electronic components, which will lead to shorter lifetime and decreased reliability.

When using a NCCS RTU in the USB port of a Nanolux ballast, the Dimming function control dial on the ballast will be taken out of function.

Once an RTU is placed into a NCCS APP ballast, the ballast starts to function in NCCS mode. If a RTU is removed from the ballast during operation OR the RTU loses communication with the DTU for any reason, the ballast will automatically turn off after 10 minutes. The ballast has to be unplugged from the power source and turned back on to reset. The ballast will then run in regular mode (no NCCS) or if a RTU is plugged in, it will operate in NCCS mode. If the ballast continues to turn off for any reason during operation with the RTU in NCCS mode, replace the RTU and confirm it is communicating with the DTU. For further NCCS APP customer support and tech support pages, visit [www.nanoluxtech.com](http://www.nanoluxtech.com).



## LAMP REPLACEMENT INSTRUCTIONS FOR BALLAST

- Always install the lamp lead before connecting your ballasts and mains.
- Always connect the ground wire to the reflector if it is not a double insulated type.
- Never disconnect a lamp by pulling the lamp cord out of a live ballast.
- Allow lamp to cool 30 minutes before or restarting (hot restrike).
- When changing a lamp, first disconnect the ballast from mains by removing the plug. Let the lamp and reflector cool down for 30 minutes before changing as they can be very hot. When replacing a defective lamp without disconnecting mains, the lamp will not start.

? SUITABLE LAMPS

The Nanolux DE 1000W and 600W ballasts are designed and tested to drive double ended High Pressure Sodium (HPS) Electronic lamps. Using regular 1000W and 600W HPS lamps can cause damage to your ballast and lamp.

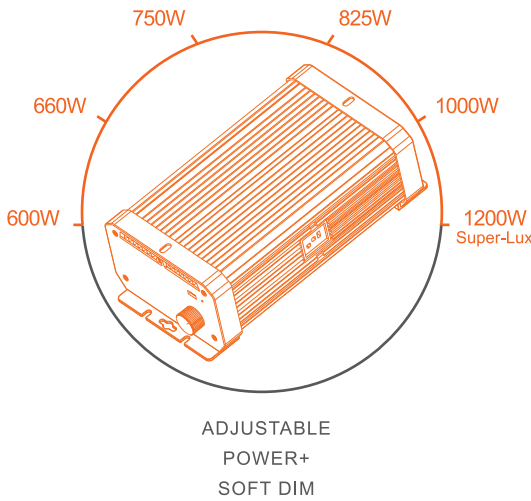
WARRANTY

Nanolux Technology warrants the mechanical and electronic components of this product to be free of defects in material and workmanship if used under normal operating conditions for a period of three (3) years from the original date of purchase. If the product shows any defects within this period and that defect is not due to user error or improper use Nanolux Technology shall, at its discretion, either replace or repair the product using suitable new or refurbished parts. In case Nanolux decides to replace the entire product, this limited warranty shall apply to the replacement product for the remaining initial warranty period, i.e. three (3) years from the date of purchase of the original product. For service return the ballast to your shop with the **original sales receipt**.

For more information about Nanolux product please visit nanoluxtech.com

OPERATING MANUAL

DIGITAL ELECTRONIC BALLAST  
SUPER DE 1000W/600W  
NCCS APP COMPATIBLE



PATENTED PRODUCTS. COUNTERFEITING NOT ALLOWED.  
Designed by NANOLUX in California  
Made in China

**NANOLUX DE**  
www.nanoluxtech.com  
Illuminating Your Grow

PLEASE READ INSTRUCTIONS FIRST BEFORE INSTALLATION

Congratulations on the purchase of your new Nanolux DE 1000W and 600W ballast. We have done everything to insure a long life and safe operations, but the installations and use of the ballast is the responsibility of the user. Incorrect use or installations can lead to failure and damage to the ballast. Damage to the ballast and electronic circuitry as a result of incorrect installations and use revokes your warranty. Read this manual carefully before installing your ballast.

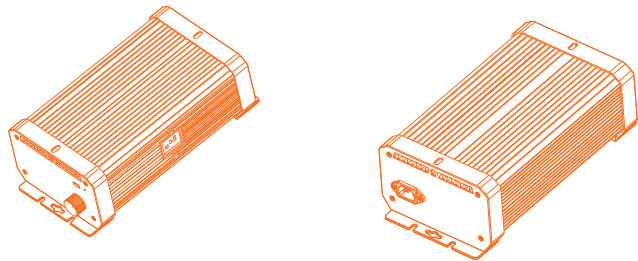
i TECHNICAL SPECIFICATIONS

Model	1000W	600W
Input Voltage	120V/208V/240V	
Output Voltage	200V-300V	70V-150V
Input Frequency	50/60Hz	50/60Hz
Output Power	1200W Max	660W Max
Power Factor	≥0.99	≥0.99
Crest Factor	≤1.7	≤1.7
THD	≤10%	≤10%
Dimming	600W-660W-750W-825W-1000W-1200W(Super-Lux)	300W-450W-600W-660W(Super-Lux)
Strike Lamp	Double Ended Lamp	Double Ended Lamp
Output Frequency	100KHz - 200 KHz	30KHz - 80KHz
Protection Function	Over Temperature Protection; Over/Under Voltage Protection; Open/Short Circuit Protection;	
Size (L*W*H)	320*167*104mm 12.6*6.6*4.1inch	214*167*104mm 8.4*6.6*4.1inch
Weight	4.7 kgs 10.4 lbs	3.1 kgs 6.8 lbs

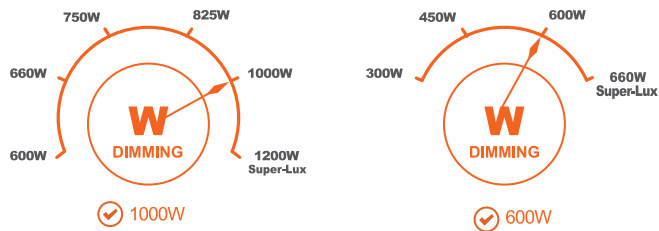
PRODUCT DESCRIPTION

The Nanolux DE ballast 1000W and 600W are state of the art adjustable horticultural quality ballast. They are designed to drive the 1000W and 600W Double Ended electronic high frequency HPS lamps. Professional electronic HPS lamps operate at very high frequency to prevent acoustic resonance and to optimize lamp life.The NCCS App system is also incorporated.

The fanless luminaire housing is sealed. The housing allows warm air to exit the housing, cool air to enter the housing when cooling down while preventing dust and moisture to enter.



-01-



SCOPE OF USE

The Nanolux DE ballasts are designed to drive horticultural high frequency HID lamps for plant cultivation. They are intended for climate room use, where it can be mounted in the climate room, or outside the climate room on a suitable non-compostable surface. The DE fanless ballasts are sealed to prevent any dust or moisture from entering the housing. They are suitable for a damp location but should not be used in wet environments or outdoors. FOR INDOOR USE ONLY.

INSTALLATION

Be sure to comply with local installation and regulations.

Always install electronic ballasts vertically, so the air can rise the ribs for optimal cooling. The lamp and reflector will be hot during operation, DO NOT touch the reflector or lamp during or right after operation.

Make sure the power cord do not connect any hot part of the ballast. Keep at least a 2 inches distance between individual ballast to insure free air flow. Only mount ballasts on a non-combustible material.

The temperature of the electronics is the most important parameter for lifetime and reliability. A normal operating environment temperature should be below 122°F. Exceeding the maximum environment temperature will stress the electronic components, which will lead to shorter lifetime and decreased reliability.

When using a NCCS RTU in the USB port of a Nanolux ballast,the Dimming function control dial on the ballast will be taken out of function.

Once an RTU is placed into a NCCS APP ballast, the ballast starts to function in NCCS mode. If a RTU is removed from the ballast during operation OR the RTU loses communication with the DTU for any reason, the ballast will automatically turn off after 10 minutes. The ballast has to be unplugged from the power source and turned back on to reset. The ballast will then run in regular mode (no NCCS) or if a RTU is plugged in, it will operate in NCCS mode. If the ballast continues to turn off for any reason during operation with the RTU in NCCS mode, replace the RTU and confirm it is communicating with the DTU. For further NCCS APP customer support and tech support pages, visit www.nanoluxtech.com.

LAMP REPLACEMENT INSTRUCTIONS FOR BALLAST

- Always install the lamp lead before connecting your ballasts and mains.
- Always connect the ground wire to the reflector if it is not a double insulated type.
- Never disconnect a lamp by pulling the lamp cord out of a live ballast.
- Allow lamp to cool 30 minutes before or restarting (hot restrike).
- When changing a lamp,first disconnect the ballast from mains by removing the plug. Let the lamp and reflector cool down for 30 minutes before changing as they can be very hot. When replacing a defective lamp without disconnecting mains,the lamp will not start.

-02-



文控编号：

料号：

64090276

图纸名称：说明书（二折页）

NB-HPSMH1000WDE-CUF-WIFI-3S-APP  
单机

版本号：

REV:B

页数：

1

研发中心

设计：

文案：

结构确认：

电子确认：

审核：

市场部：

备注/说明：

尺寸: 280x200mm  
(到货对折，尺寸：280x100mm)

要求: 128g双铜, 双面4色印

折后 反面

折后 正面