HIGH QUALITY
HORTICULTURE LAMPS
FOR ALL OF YOUR GROWING NEEDS

Denkyu lamps bring the power of the sun indoors through impeccable engineering.
Denkyu lamps bring the POWER OF THE SUN indoors through impeccable engineering and efficient design.
Denkyu Lighting, Inc. was founded in 2007 as a premier HID light bulb manufacturer. We use only finely made parts and materials from the United States, Japan, and China at our factories. Our capacity is 3.2 million pieces per year. Denkyu Lighting currently manufactures the following HID lighting products in our ISO 9001 certified facility:

- High Pressure Sodium Bulbs (35W – 2000W)
- Metal Halide Bulbs (50W – 10000W)
- Ceramic Metal Halide Bulbs (20W – 315W)

Much of the assembling and inspection machinery we use are exclusively designed, built, and maintained by Denkyu Lighting, Inc. All of our specialty products are designed, developed, and manufactured by us. We inspect all Denkyu products visually and mechanically as well as test them before packaging. All Denkyu products are manufactured according to American National Standards Institute (ANSI) safety standards.

Denkyu Lighting, Inc. provides top quality Horticulture Bulbs at a reasonable price. Originating in Japan, Denkyu bulbs are made with only the finest materials, including hand blown quartz glass. We offer a wide range of HID bulbs that are guaranteed to produce results. Our 1000W horticulture lights produce over 2 lbs per light fixture. Side by side comparisons have shown that our lights produce higher yields than competing brands. Denkyu lamps are made for industrial growers with cost and maximum efficiency in mind. Our horticulture products will take your grow rooms to the next level. Make the switch today!

For the convenience of our North American business associates, we have a warehouse located in Signal Hill, California. Denkyu Lighting also has sales as well as research and development offices in that location.
DENKYU CMH series has undergone detailed factory testing to ensure top quality yields for your plants. Our studies have shown that DENKYU CMH Grow Lights produce yields that compete head-to-head with leading brands. Using a highly refined ceramic discharge tube, we have produced a quality horticulture bulb that is guaranteed to last longer and shine brighter. DENKYU CMH bulbs are easy to install and can be used in a universal operating position to fit the needs of any grower.

**Features:**
- *1 Year warranty*
- *High lumen maintenance*
- *50% to 110% dimmability*
- *Suitable for high frequency digital ballast*
- *Optimized spectrum encourages plant growth*

**Replacement for Optimal Growth: 10 to 12 months**
DENKYU LIGHTING, INC.

-HORTICULTURAL FLOWERING LIGHTS-

**GENERATION 6 DOUBLE ENDED HPS LAMPS**

At a private testing facility, we achieved 2.8lb per light fixture with the Generation-6 DE1000W by 100KHz ballast with an optimized light reflector. Our lamp users have won the cannabis cup. The new HPS1000/DE Generation 6 comes with a higher filling pressure, bringing greater yield and higher quality flowers.

![Diagram of HPS lamp](image)

Features:
- *1 Year warranty*
- *High lumen maintenance*
- *50% to 115% dimmability*
- *2200umols by hi-xenon filling pressure*
- *Optimized spectrum encourages flowering growth*

DENKYU HPS lamps are designed to project the fullest light spectrum, guaranteeing maximum photosynthesis during the flowering period. All of the lamps feature a strong arc-tube with an available dimming range from 50% to 115%.

**Spectrum Energy Distribution**

<table>
<thead>
<tr>
<th>Item Code</th>
<th>Product Descriptions</th>
<th>PAR</th>
<th>Ballast</th>
<th>Base Type</th>
<th>CS Qty</th>
<th>OP</th>
<th>10% lumen depreciation</th>
<th>Fig</th>
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</thead>
<tbody>
<tr>
<td>10771</td>
<td>HPS1000/DE/GENERATION 6</td>
<td>2200umol</td>
<td>80KHz-120Khz</td>
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<td>6</td>
<td>U</td>
<td>10,000hrs</td>
<td>A</td>
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<tr>
<td>10759</td>
<td>HPS600/DE/GENERATION 6</td>
<td>1100umol</td>
<td>80KHz-120Khz</td>
<td>Double Ended</td>
<td>6</td>
<td>U</td>
<td>10,000hrs</td>
<td>A</td>
</tr>
</tbody>
</table>

Replacement for Optimal Growth: 10 to 12months

Room temp: 70–73
Humidity: 50%
Co2: 1500ppm
Flowering duration: 9 weeks
Plain water period: 7 days

- 75% Intensity/week 1
- 100% Intensity/week 2-4
- 110% Intensity/week 5-8
- 100% Intensity/week 9
- 75% Intensity/plain water
SIGNATURE HPS SINGLE ENDED GROW LAMPS

DENKYU’s development team has created one of the highest performing single ended horticulture bulbs on the market. After 5 years of trials and tests, the DENKYU HPS/SE has reached the pinnacle of success. With a stable lamp structure and secure vacuum sealing, the SE Series has optimized lumen maintenance. The high xenon filling pressure brings out the purest red spectrum of sodium, leaving your plants happy and healthy.

Our lamps are made for industrial growers with cost in mind. Growing 4 plants in a 6’x6’ area will bring over 2.4 pounds per light fixture. Big brand names have flashy labels and big price tags, but at the end of the day quality engineering is what counts. With DENKYU. You will see your plants thrive and eat more base nutrients than ever before!

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<th>Fig</th>
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<tr>
<td>10757</td>
<td>HPS1000/E25/GEN5</td>
<td>2100umol</td>
<td>50KHz~120Khz</td>
<td>E39 Mogul</td>
<td>12</td>
<td>U</td>
<td>10,000hrs</td>
<td>B</td>
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<tr>
<td>10756</td>
<td>HPS600/T15/GEN5</td>
<td>1100umol</td>
<td>50KHz~120Khz</td>
<td>E39 Mogul</td>
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<td>10,000hrs</td>
<td>C</td>
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<td>10754</td>
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<td>U</td>
<td>10,000hrs</td>
<td>D</td>
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</tbody>
</table>

Replacement for Optimal Growth: 10 to 12months
**SIGNATURE DUAL-ARC LAMP**

DENKYU Dual-Arc HMX1000W combines both MH600 and HPS430 discharge tubes in one lamp, leading to a hassle free growing process. The lamp works an S52 magnetic ballast or digital ballasts between 50KHz to 100KHz. This lamp can be used for a flowering cycle, or the whole process through vegetating to flowering.

We recommend to have a distance of 3 feet between the top of the flower and the reflector.

At a private testing facility, we achieved 2.5lbs per light fixture with Sour Diesel, using an HMX1000W Dual-Arc lamp. We use it with 22 hour cycles of vegetating and 12 hour cycles of flowering. As the result, both the flower quality and trichome production are greatly increased.

**Features:**
- 1 Year warranty
- High lumen maintenance
- 50% to 110% dimmability
- Works on both S52 magnetic and digital ballast
- Optimized spectrum encourages flowering and vegetating growth

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**Spectrum Energy Distribution**

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**Item Code** | **Product Descriptions** | **PAR** | **Ballast** | **Base Type** | **CS Qty** | **OP** | **10% lumen depreciation** | **Fig**
--- | --- | --- | --- | --- | --- | --- | --- | ---
10830 | HMX1000/E25/GEN5 | 2100umol | 50KHz~120Khz | E39 Mogul | 12 | U | 8,000hrs | E

Replacement for Optimal Growth: 10 to 12months
SIGNATURE SE VEGETATING LAMPS

DENKYU QMH lamps are conversion bulbs that work with HPS magnetic ballasts or digital ballasts between 50KHz to 120KHz.

The balanced spectrum from our vegetating lights reinforces leaves to grow thicker and greener. Our perfected UV spectrum promotes optimal plant growth all the way to the start of the flowering period. Growers need to make sure that vegetating plants are ready for the 12 hour flowering cycle before switching to the lights. To do so, ensure that your plants have adequate amounts of base nutrients, Co2, have a room temperature below 78F, and keep your plants dancing with an oscillating fan.

At a private testing facility, we achieved 2.4lb per light fixture. We used DENKYU QMH1000W lights with 22 hour cycles of vegetating and DENKYU HPS1000W with 12 hour cycles of flowering.

Features:
* 1 Year warranty
* High lumen maintenance
* 50% to 115% dimmability
* Suitable for both magnetic and digital ballast
* Optimized spectrum encourages flowering growth

<table>
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<tr>
<th>Item Code</th>
<th>Product Descriptions</th>
<th>CT</th>
<th>Ballast</th>
<th>Base Type</th>
<th>CS Qty</th>
<th>OP</th>
<th>10% lumen depreciation</th>
<th>Fig</th>
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<tr>
<td>10821</td>
<td>QMH1000/T25/VEG/GEN5</td>
<td>6000K</td>
<td>50KHz~120Khz</td>
<td>S52 Magnetic or Digital</td>
<td>12</td>
<td>U</td>
<td>8,000hrs</td>
<td>F</td>
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<tr>
<td>10756</td>
<td>QMH600/T15/VEG/GEN5</td>
<td>6000K</td>
<td>50KHz~120Khz</td>
<td>S106 Magnetic or Digital</td>
<td>12</td>
<td>U</td>
<td>8,000hrs</td>
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Replacement for Optimal Growth: 10 to 12 months
Denkyu Lighting warrants lamps to be free from defects in material and workmanship during the period ending of one year after the date of sale, or if unknown, after the date of manufacture. Denkyu Lighting offers this warranty for all Denkyu HID purchases from an authorized retail store and/or distributors.*

*All warranty claims must be directed to the retail store where the lamp was purchased.
THE FUTURE OF L.E.D. IS HERE...

www.denkyulighting.com
Use a metal chain to adjust the height of the reflector.

2ft between the light and the top of the plants.

5 gallon pot.
LED Hybrid Grow Light 280W

Direct AC Connection / Replacable LED Bars

- Input 110~277Vac, 50/60Hz
- 347~480Vac (Optional)
- 36,000 Lumens, 130 L/W
- CRI85
- Low Glare
- IP67
- Continuously Dimmable to < 10%
- Full Spectrum
- 5 Year/50,000 Hours Warranty
- Intergrated Smart Lighting Option
- Engineered in USA, Assembling in USA

Easy install
- Yoke Mount +/- 75° rotation
- Chain mount

Smart Electronics?
- Universal AC 90-305V
- Over temperature protection

Optimized Integral Optics
- 1.6-2.0x improved lux levels
- Even illumination for S< 0.5-1.5
- Low glare
- External reflector not required
- 90 or 120° beam angle available

Passive cooling system
Fanless for high reliability

When compared to HID Horticulture products, LED's promote plant growth in a completely different spectrum. With high quality chips and drivers made by CREE and Philips, our new Denkyu Optimal LED Series will shine bright for years to come.

On top of out of this world energy savings, our Horticulture LED's will allow you to customize every aspect of your growing experience. Growers will be able to choose from 3 different wattages (280W-600W), each with replaceable beam angles ranging from 90/120 degrees. Fixture heights can be adjusted with chain mounts to suit the needs of any room. Different light colors can be added to the fixtures as well, bringing you a truly customizable LED experience.

In a world of exponential technology, horticulture lighting has come a long way since its origins in standard HID lamps. With our new Denkyu Optimal LED Series, you will see first hand how far human advancement has gone.

The Denkyu Optimal LED Series brings indoor lighting to a new level of perfection. The superior craftsmanship and design allows for even heat dissipation, eliminating the need for a cooling fan. The new LED Series also comes with a self-cleaning function that allows users to keep their hands clean and their systems running smoothly.
Performance Summary

<table>
<thead>
<tr>
<th>Power</th>
<th>Lumens</th>
<th>L/W</th>
<th>Ambient Free Air</th>
</tr>
</thead>
<tbody>
<tr>
<td>280W</td>
<td>36,000</td>
<td>130</td>
<td>50° C/122F</td>
</tr>
</tbody>
</table>

High Power LED Grow Light
- High efficiency LED outputs
- Replace 600W~ HPS or MH grow lights
- Passive cooling, LED chip sit on alminum bars for better heat sink, no active cooling fans needed
- Wavelength from 420~670nm
- Low Glare
- 90-305 VAC 50/60 Hz Input Voltage
- 0-10V dimming standard
- Optional ZigBee wireless controls
- 5 Years or 50,000 hours warranty

Mechanical
- Fixed mounting
- Universal orientation
- Beautiful anodized solid aluminum body
- 11.8 kg / 26 lb
- Fanless for high reliability & efficiency
- Dimension Size: 22 x 13 x 4"

Electrical
- 110-277 VAC 50/60 Hz Input Voltage
- 347~480VAC (Optional)
- PF > 0.95

Certifications
- Suitable for Dry and Damp locations.
- This device is not intended for use with emergency exits.

Photometry
Highly optimized optical distribution enables excellent illuminance that matches legacy HID fixtures in average lux values and in uniformity with \( \text{Min/Avg}>0.75 \) for spacing criteria, \( SC=0.5-1.5 \). Simultaneously, low glare is achieved with a 90° or 120° cutoff. Photometry is substantially maintained regardless of input voltage for the ballast bypass case or the ballast compatible case.

Distribution at 36,000 lm

Additional customized LED bars are available for purchase
- DEN280-R for enhanced Red spectrum module
- DEN280-B for enhanced Blue spectrum module

ORDERING INFORMATION
Example: DEN-280-40-VL-BL-B120-010

<table>
<thead>
<tr>
<th>Series</th>
<th>Power</th>
<th>CCT</th>
<th>Input</th>
<th>Finish</th>
<th>Optics</th>
<th>Control Module</th>
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</thead>
<tbody>
<tr>
<td>DEN</td>
<td>280</td>
<td>30</td>
<td>3000K</td>
<td>VL</td>
<td>BL</td>
<td>B90 90° 010</td>
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<tr>
<td></td>
<td></td>
<td>40</td>
<td>4000K</td>
<td>HL</td>
<td>GR</td>
<td>B120 120°</td>
</tr>
</tbody>
</table>

NOTES
1. Light loss factor of HID LLF=60% and LED LLF=85%.
2. Unless otherwise specified, all values are typical at 25°C with no optical accessory.
3. Individual installation's payback duration may differ.
4. Above rated ambient air, the electronics will turn down the light output to protect from over temperature.
5. See limited warranty for details.
6. TM21 projection to 100,000 Hours rated life at ambient air temperature of 25°C
7. Driver records values for later warranty analysis by manufacturer.
8. Not intended for use in environments containing airborne corrosive agents such as chemicals, solvents or cutting fluids.
9. Specifications subject to change without notice
LED Hybrid Grow Light 450W

Direct AC Connection / Replacable LED Bars

- Input 110~277Vac, 50/60Hz
- 347~480Vac (Optional)
- 56,000 Lumens, 125 L/W
- CRI85
- Low Glare
- IP67
- Continuously Dimmable to < 10%
- Full Spectrum
- 5 Year/50,000 Hours Warranty
- Intergrated Smart Lighting Option
- Engineered in USA, Assembling in USA

- Easy install
  - Yoke Mount +/- 75° rotation
  - Chain mount

- Smart Electronics
  - Universal AC 90-305V
  - Over temperature protection

- Smart Integral Control Module
  - 0-10V dimming standard
  - Wireless ZigBee control option

- Passive cooling system
  - Fanless for high reliability

- Optimized Integral Optics
  - 1.6-2.0x improved lux levels
  - Even illumination for SC= 0.5-1.5
  - Low glare
  - External reflector not required
  - 90 or 120° beam angle available

When compared to HID Horticulture products, LED’s promote plant growth in a completely different spectrum. With high quality chips and drivers made by CREE and Philips, our new Denkyu Optimal LED Series will shine bright for years to come.

On top of out of this world energy savings, our Horticulture LED’s will allow you to customize every aspect of your growing experience. Growers will be able to choose from 3 different wattages (280W-600W), each with replaceable beam angles ranging from 90/120 degrees. Fixture heights can be adjusted with chain mounts to suit the needs of any room. Different light colors can be added to the fixtures as well, bring you a truly customizable LED experience.

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<th>Lumens</th>
<th>L/W</th>
<th>Ambient Free Air</th>
</tr>
</thead>
<tbody>
<tr>
<td>450W</td>
<td>56,000</td>
<td>125</td>
<td>50° C/122F</td>
</tr>
</tbody>
</table>

High Power LED Grow Light
- High efficiency LED outputs
- Replace 600W–1000W HPS or MH grow lights
- Passive cooling, LED chip sit on alminum bars for better heat sink, no active cooling fans needed
- Wavelength from 420–670nm
- Low Glare
- 90-305 VAC 50/60 Hz Input Voltage
- 0-10V dimming standard
- Optional ZigBee wireless controls
- 5 Years or 50,000 hours warranty

Mechanical
- Fixed mounting
- Universal orientation
- Beautiful anodized solid aluminum body
- 19.5 kg / 43 lb
- Fanless for high reliability & efficiency
- Dimension Size: 27 x 20 x 5”

Electrical
- 110-277 VAC 50/60 Hz Input Voltage
- 347~480VAC (Optional)
- PF > 0.95

Certifications
- Suitable for Dry and Damp locations.
- This device is not intended for use with emergency exits.

ORDERING INFORMATION
Example: DEN-450-40-VL-BL-B120-010

Photometry
Highly optimized optical distribution enables excellent illuminance that matches legacy HID fixtures in average lux values and in uniformity with Min/Avg > 0.75 for spacing criteria, SC=0.5-1.5. Simultaneously, low glare is achieved with a 90° or 120° cutoff. Photometry is substantially maintained regardless of input voltage for the ballast bypass case or the ballast compatible case.

Distribution at 56,000 lm

Additional customized LED bars are available for purchase
- **DEN450-R** for enhanced Red spectrum module
- **DEN450-B** for enhanced Blue spectrum module

NOTES
1. Light loss factor of HID LLF=60% and LED LLF=85%.
2. Unless otherwise specified, all values are typical at 25°C with no optical accessory.
3. Individual installation’s payback duration may differ.
4. Above rated ambient air, the electronics will turn down the light output to protect from over temperature.
5. See limited warranty for details.
6. TM21 projection to 100,000 Hours rated life at ambient air temperature of 25°C

7. Driver records values for later warranty analysis by manufacturers.
8. Not intended for use in environments containing airborne corrosive agents such as chemicals, solvents or cutting fluids.
9. Specifications subject to change without notice.
LED Hybrid Grow Light 600W
Direct AC Connection / Replacable LED Bars

• Input 110~277Vac, 50/60Hz
  347~480Vac (Optional)
• 75,000 Lumens, 125 L/W
• CRI85
• Low Glare
• IP67
• Continuously Dimmable to < 10%
• Full Spectrum
• 5 Year/50,000 Hours Warranty
• Intergrated Smart Lighting Option
• Engineered in USA, Assembling in USA

Easy install
• Yoke Mount +/- 75° rotation
• Chain mount

Smart Electronics
• Universal AC 90-305V
• Over temperature protection

Smart Integral Control Module
• 0-10V dimming standard
• Wireless ZigBee control option

Passive cooling system
• Fanless for high reliability

Optimized Integral Optics
• 1.6-2.0x improved lux levels
• Even illumination for SC= 0.5-1.5
• Low glare
• External reflector not required
• 90 or 120° beam angle available

When compared to HID Horticulture products, LED’s promote plant growth in a completely different spectrum. With high quality chips and drivers made by CREE and Philips, our new Denkyu Optimal LED Series will shine bright for years to come.

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<td>125</td>
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High Power LED Grow Light

- High efficiency LED outputs
- Replace 600W~1500W HPS or MH grow lights
- Passive cooling, LED chip sit on alminum bars for better heat sink, no active cooling fans needed
- Wavelength from 420~670nm
- Low Glare
- 90-305 VAC 50/60 Hz Input Voltage
- 0-10V dimming standard
- Optional ZigBee wireless controls
- 5 Years or 50,000 hours warranty

Mechanical

- Fixed mounting
- Universal orientation
- Beautiful anodized solid aluminum body
- 23 kg / 51 lb
- Fanless for high reliability & efficiency
- Dimension Size: 34 x 27 x 5’’

Electrical

- 110-277 VAC 50/60 Hz Input Voltage
- 347~480VAC (Optional)
- PF > 0.95

Certifications

- Suitable for Dry and Damp locations.
- This device is not intended for use with emergency exits.

ORDERING INFORMATION

Example: DEN-450-40-VL-BL-B120-010

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<td>600W</td>
<td>30</td>
<td>3000K</td>
<td>BL</td>
<td>B90</td>
<td>010 0-10V</td>
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<td>4000K</td>
<td>H 347-488</td>
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<td>B120</td>
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Photometry

Highly optimized optical distribution enables excellent illuminance that matches legacy HID fixtures in average lux values and in uniformity with Min/Avg>0.75 for spacing criteria, SC=0.5-1.5. Simultaneously, low glare is achieved with a 90° or 120° cutoff. Photometry is substantially maintained regardless of input voltage for the ballast bypass case or the ballast compatible case.

Distribution at 75,000 lm

NOTES

1. Light loss factor of HID LLF=60% and LED LLF=85%.
2. Unless otherwise specified, all values are typical at 25°C with no optical accessory.
3. Individual installation’s payback duration may differ.
4. Above rated ambient air, the electronics will turn down the light output to protect from over temperature.
5. See limited warranty for details.
6. TM21 projection to 100,000 Hours rated life at ambient air temperature of 25°C.
7. Driver records values for later warranty analysis by manufacturer.
8. Not intended for use in environments containing airborne corrosive agents such as chemicals, solvents or cutting fluids.
9. Specifications subject to change without notice.
LED Hybrid Grow Light  150W

Direct AC Connection OR Ballast Compatible

- 600W HID Equivalent
- Saves up to 500W
- 20,000 Lumens, 130 L/W
- CRI85
- Low Glare
- Continuously Dimmable to < 10%
- ROI < 1 Year
- 5 Year/50,000 Hours Warranty
- Intergrated Smart Lighting Option
- Engineered in USA

Mogul Base
- Easy install
- Ballast Bypass or Ballast compatible

Smart Electronics
- Universal AC 90-305V
- Self metering
- Over temperature protection

ThruFlow™ Heatsink
- Fanless for high reliability
- Ambient 50°C free air

Optimized Integral Optics
- 1.6-2.0x improved lux levels
- Even illumination for SC= 0.5-1.5
- Low glare with 50° cutoff
- External reflector not required

Smart Integral Control Module
- 0-10V dimming standard
- Wireless ZigBee control option

Denkyu’s new LED Hybrid Grow Light outperforms other LED lamps with its innovative design and superior technology. Made for hydroponic lighting, our LED grow light has been transformed to optimize plant growth with maximum efficiency.

Designed in the USA, its patented technology combines an Ultralight heatsink; an optical system that provides even illumination with low glare; and an intelligent driver. Reliability and efficiency are ensured by a proprietary ThruFlow™ heatsink design that maintains low temperatures without a fan.

Our new LED provides the convenience of a screw socket, 0-100% dimmable. This 600W HID replacement will save you $1000s, as it runs cool and maximizes your yields.

Applications include: warehouses / industrial grow spaces, and tent/closet grow spaces.
**Performance Summary**

- Open fixture rated
- 20,000 lumens/150W
- 130 L/W
- Low Glare
- 90-305 VAC 50/60 Hz Input Voltage OR Magnetic Ballast compatible
- Ambient air operation to 50°C/122°F
- 0-10V dimming standard
- Optional ZigBee wireless controls (Daintree certified)
- 5 Years or 50,000 hours warranty

**Mechanical**

- E39, E39X or E40 socket compatible
- Vertical orientation only
- Beautiful anodized solid aluminum body
- 1.65 kg / 3.6 lb
- Fanless for high reliability & efficiency
- Safety harness optional

**Electrical - Ballast Bypass**

- 90-305 VAC 50/60 Hz Input Voltage Max
- PF > 0.9

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<thead>
<tr>
<th>VAC</th>
<th>100</th>
<th>110</th>
<th>120</th>
<th>220</th>
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<td>1.36</td>
<td>1.25</td>
<td>0.68</td>
<td>0.63</td>
<td>0.54</td>
</tr>
</tbody>
</table>

**Electrical - Ballast Compatible**

The retrofit solution is compatible with European and North American HID magnetic ballast between 175-600W 50Hz/60Hz. Such ballast types include probe start, pulse start, CWA or reactive.

**USA Ballast Types (E39X)**

- Metal Halide: M58, M59, M128, M131, M132, M135, M136, M138, M153, M154, M155, M172
- HPS: S50, S51, S66, S107
- Mercury Vapor: H33, H37

**European Ballast Types (E40)**

- Metal halide: MH250, MH400
- HPS: NG 250, NG 400, NG 600
- Mercury Vapor: HM250, HM400

**Certifications**

- Suitable for Dry and Damp locations.
- Suitable for open vented fixtures

**Photometry**

Highly optimized optical distribution enables excellent illuminance that matches legacy HID fixtures in average lux values and in uniformity with Min/Avg>0.75 for spacing criteria, SC=0.5-1.5. Simultaneously, low glare is achieved with a 50° cutoff. Photometry is substantially maintained regardless of input voltage for the ballast bypass case or for the ballast compatible case.

**ORDERING INFORMATION**

Example: DEN-E39-150-40-VL-B90-010

<table>
<thead>
<tr>
<th>Series</th>
<th>Base</th>
<th>Power</th>
<th>CRI</th>
<th>CCT</th>
<th>Input Finish</th>
<th>Optics</th>
<th>Control Module</th>
</tr>
</thead>
<tbody>
<tr>
<td>DEN</td>
<td>E39</td>
<td>150W</td>
<td>8</td>
<td>85</td>
<td>4000K</td>
<td>AN</td>
<td>B90 010 0-10V</td>
</tr>
<tr>
<td></td>
<td>E40</td>
<td></td>
<td></td>
<td></td>
<td>5000K</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**NOTES**

1. Light loss factor of HID LLF=60% and LED LLF=85%.
2. Unless otherwise specified, all values are typical at 23°C with no optical accessory.
3. Individual installation’s payback duration may differ.
4. Above 50°C ambient air, the electronics will turn down the light output to protect from over temperature.
5. See limited warranty for details.
6. TM21 projection to 100,000 Hours rated life at ambient air temperature of 25°C.
7. Driver records values for later warranty analysis by manufacturer.
8. Not intended for use in wet environments or environments containing airborne corrosive agents such as chemicals, solvents or cutting fluids.
10. Specifications subject to change without notice.
Denkyu’s new LED Hybrid Grow Light outperforms other LED lamps with its innovative design and superior technology. Made for hydroponic lighting, our LED grow light has been transformed to optimize plant growth with maximum efficiency.

Designed in the USA, its patented technology combines an Ultralight heatsink; an optical system that provides even illumination with low glare; and an intelligent driver. Reliability and efficiency are ensured by a proprietary ThruFlow™ heatsink design that maintains low temperatures without a fan.

Our new Direct AC Hook Mounting Grow Light comes with a high quality mounting hook, allowing users to fully customize their growing operation. Whether it’s vertically or horizontally, users will be able to move our LED with ease, as well as having 0-100% dimmability. This 600W HID replacement will save you $1000s, as it runs cool and maximizes your yields.

Applications include: warehouses / industrial grow spaces, and tent/closet grow spaces.
Performance Summary

<table>
<thead>
<tr>
<th>Power</th>
<th>Lumens</th>
<th>L/W</th>
<th>Ambient Free Air</th>
</tr>
</thead>
<tbody>
<tr>
<td>150W</td>
<td>20,000</td>
<td>130</td>
<td>50° C/122F</td>
</tr>
</tbody>
</table>

- Low Glare
- 90-305 VAC 50/60 Hz Input Voltage
- 0-10V dimming standard
- Optional ZigBee wireless controls (Daintree certified)
- 5 Years or 50,000 hours warranty

Mechanical

- Fixed hook mounting
- Vertical orientation only
- Beautiful anodized solid aluminum body
- 1.85 kg / 4.1 lb
- Fanless for high reliability & efficiency
- Safety harness optional

Electrical

- 90-305 VAC 50/60 Hz Input Voltage
- PF > 0.9

Certifications

- Suitable for Dry and Damp locations.
- This device is not intended for use with emergency exits.

ORDERING INFORMATION

Example: DEN-FIX-150-40-VL-B90-010

Series | Base  | Power | CRI | CCT | Input | Finish | Optics | Control Module |
-------|-------|-------|-----|-----|-------|--------|--------|----------------|
DEN    | FIX   | Hook  | 150 | 85  | 40    | AN     | B90    | 010 0-10V     |

Photometry

Highly optimized optical distribution enables excellent illuminance that matches legacy HID fixtures in average lux values and in uniformity with Min/Avg>0.75 for spacing criteria, SC=0.5-1.5. Simultaneously, low glare is achieved with a 50° cutoff. Photometry is substantially maintained regardless of input voltage for the ballast bypass case or the ballast compatible case.

Distribution at 20,000 lm

NOTES

1. Light loss factor of HID LLF=60% and LED LLF=85%.
2. Unless otherwise specified, all values are typical at 25°C with no optical accessory.
3. Individual installation’s payback duration may differ.
4. Above rated ambient air, the electronics will turn down the light output to protect from over temperature.
5. See limited warranty for details.
6. TM21 projection to 100,000 Hours rated life at ambient air temperature of 25°C
7. Driver records values for later warranty analysis by manufacturer.
8. Not intended for use in wet environments or environments containing airborne corrosive agents such as chemicals, solvents or cutting fluids.
9. Specifications subject to change without notice
Our wide range of HID/LED Horticulture Lamps can service the needs of any growing project. Denkyu’s high yields and long lasting life are unmatched in a competitive horticulture market.