# HMI® Metal Halide Lamp Family

## Key Features & Benefits

- High intensity light simulates daylight color temperature of 6000K with a CRI >90
- Enhanced safety with UV-Stop (UVS) feature on select HMI single-end lamps
- Stronger, longer life with multiple moly-foils in seal design
- Mechanically robust with e**X**treme **S**eal (XS) technology, up to 450°C at the pinch seal
- Capable of hot restrike ignition
- High color stability with average changes in color temperature during lamp life only 1° K/hr
- Dimmable down to 40% with stable color using many electronic ballasts
- High energy efficiency providing up to 100 LPW

For over 50 years, OSRAM HMI lamps have been meeting the toughest demands of the film and TV industry. HMI lamps simulate daylight color temperature of 6000K and have excellent color rendering and photometric integrity throughout their life. OSRAM received an OSCAR® in 1987 and a PRIMETIME EMMY® Engineering award in 2007 for the invention and continuous improvement of HMI lamp technology. As a result, the HMI lamp family continues to be an integral part of film sets around the world. HMI lamps are available in single or double end with wattages from 200 to 24,000.

In 2013 OSRAM introduced the UVS family of single-end lamps, which added UV-Stop to the outer quartz to provide enhanced safety for those on the set. Recognizable by their orange base, HMI UVS lamps block most harmful UV radiation while it simulates the same daylight color temperature with performance customers expect from OSRAM lamps.

This UV-Stop has been incorporated in additional types, such as the new HMI DIGITAL and HMI STUDIO families of single-end lamps. HMI DIGITAL lamps approximate daylight (6000K) color temperature that designers know and love, but now modified for increased performance and reduced flicker on newer, high frequency ballasts. HMI STUDIO is an innovative new family of HMI lamps with CTO in the outer quartz with a warm color temperature (2800K to 3400K inside of a fixture) that closely matches that of tungsten light sources. Using many of the same components as the HMI DIGITAL lamps, they also emit no ultra-violet radiation.

Lastly, the HMI EVENT series of lamps are used primarily for exhibitions and auto shows. Identified with their black base, they have improved heat resistance for high thermal requirements, along with a tighter range of color temperatures. Similar to the orange base lamps, they also incorporate UV-Stop in their outer quartz.

## Product Offering

| Type | Wattage Range | Notes |
|---|---|---|
| Single-End DIGITAL | 200W-4000W* | Cool white, contains UV-Stop, designed for high-speed ballasts |
| Single-End STUDIO | 200W-800W* | Warm white, contains UV-Stop, designed for high-speed ballasts |
| Single-End EVENT | 575W-1200W | Contains UV-Stop |
| Single-End Other | 6000W-18,000W | — |
| Double End | 575W–24,000W | — |

*Higher wattages planned

## Application Information

### Applications

- Film, TV and video productions
- Industrial solar simulation
- Lighting for major events, exhibition and auto shows
- Professional photography
- Stage lighting (theatre, opera, etc.)

### Typical Fixtures

- Follow and moving-head spotlights
- Fresnel luminaires
- PAR/open luminaires
- Soft and flood lighting

### Application Notes

1. These lamps may emit ultraviolet (UV) radiation and operate at high pressure. Before use, read the complete warnings accompanying the product.
2. HMI lamps may only be operated in enclosed lamp fixtures specially constructed for that purpose.
3. HMI lamps are available in single end and double end.
4. Use electronic ballasts for the best performance.

### Disposal

HMI lamps contain mercury. When disposing of spent lamps, always consult federal, state, local and provincial hazardous waste disposal rules and regulations to ensure proper disposal.

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## Ordering Information

| Item Number | Ordering Abbreviation | UV-Stop | Watts (W) | Volts (V) | Current (Amps) | Base | Color Temp (K) | CRI | Arc Gap (mm) | Lumens (lm) | Average Rated Life (hrs) | Operating Position |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **SINGLE END** | | | | | | | | | | | | |
| 55072 | HMI DIGITAL 200W | Yes | 200 | 69 | 2.9 | GZY9.5 | 6900[1] | >90 | 5 | 16,000 | 200 | Any |
| 55176 | HMI STUDIO 200W | Yes | 200 | 69 | 2.9 | GZY9.5 | 3600[1] | >90 | 5 | 10,800 | 200 | Any |
| 55073 | HMI DIGITAL 400W | Yes | 400 | 75 | 5.3 | GZZ9.5 | 6700[1] | >90 | 6 | 32,500 | 650 | Any |
| 55177 | HMI STUDIO 400W | Yes | 400 | 75 | 5.3 | GZZ9.5 | 3600[1] | >90 | 6 | 21,500 | 500 | Any |
| 55074 | HMI DIGITAL 575W | Yes | 575 | 94 | 6.1 | G22 | 6400[1] | >90 | 7 | 49,000 | 1000 | Any |
| 55178 | HMI STUDIO 575W | Yes | 575 | 99 | 5.8 | G22 | 4050[1] | >90 | 7 | 32,400 | 500 | Any |
| 53974 | HMI 575 EVENT | Yes | 575 | 95 | 7 | G22 | 6000 | >90 | 7 | 49,000 | 1000 | Any |
| 55076 | HMI DIGITAL 800W | Yes | 800 | 95 | 8.4 | G22 | 6300[1] | >90 | 7 | 69,000 | 1000 | Any |
| 55179 | HMI STUDIO 800W | Yes | 800 | 97 | 8.3 | G22 | 3850[1] | >90 | 7 | 47,300 | 500 | Any |
| 55077 | HMI DIGITAL 1200W | Yes | 1200 | 100 | 12 | G38 | 6800[1] | >90 | 10 | 110,000 | 1000 | Any |
| 53975 | HMI 1200W EVENT | Yes | 1200 | 100 | 13.8 | G38 | 6000 | >90 | 10 | 110,000 | 1000 | Any |
| 55078 | HMI DIGITAL 1800W | Yes | 1800 | 140 | 12.9 | G38 | 6500[1] | >90 | 10 | 165,000 | 750 | Any |
| 55182 | HMI DIGITAL 2500W | No | 2500 | 115 | 25.6 | G38 | 6000[1] | >90 | 14 | 240,000 | 500 | Any |
| 54321 | HMI 4000W/SE/XS | No | 4000 | 200 | 24 | G38 | 6000 | >90 | 20 | 380,000 | 500 | Any |
| 54099 | HMI 6000W/SE/XS | No | 6000 | 123 | 55 | GX38 | 6000 | >90 | 23 | 600,000 | 500 | s135[2] |
| 54464 | HMI 9000W/SE/XS | No | 9000 | 160 | 56 | GX38 | 6000 | >90 | 26 | 875,000 | 400 | s135[2] |
| 54113 | HMI 12000W/SE/XS | No | 12,000 | 160 | 84 | GX38 | 6000 | >90 | 27 | 1,150,000 | 500 | s135[2] |
| 54324 | HMI 18000W/SE/GX51 | No | 18,000 | 225 | 88 | GX51 | 6000 | >90 | 44 | 1,600,000 | 350 | s135[2] |
| **DOUBLE END** | | | | | | | | | | | | |
| 54313 | HMI 575W/DXS | No | 575 | 95 | 7 | SFc10-4 | 6000 | 90 | 7 | 49,000 | 1000 | Any |
| 55139 | HMI 1200W/DXS | No | 1200 | 100 | 13.8 | SFc15.5 | 6000 | 90 | 10 | 110,000 | 1000 | Any |
| 54068 | HMI 2500W/S/XS | No | 2500 | 115 | 25.6 | SFa21 | 6000 | 90 | 14 | 240,000 | 500 | p30[2] |
| 54265 | HMI 2500W/DXS | No | 2500 | 115 | 25.6 | SFa21 | 6000 | 90 | 14 | 240,000 | 500 | p30[2] |
| 54314 | HMI 4000W/DXS | No | 4000 | 200 | 24 | SFa21 | 6000 | 90 | 34 | 380,000 | 500 | p15[2] |
| 54315 | HMI 6000W/DXS | No | 6000 | 123 | 55 | S25.5 | 6000 | 90 | 21 | 570,000 | 500 | p15[2] |
| 54316 | HMI 12000W/DXS | No | 12,000 | 160 | 84 | S30 | 6000 | 90 | 25 | 1,150,000 | 500 | p15[2] |
| 54213 | HMI 18000W/DXS | No | 18,000 | 225 | 88 | S30 | 6000 | 90 | 44 | 1,700,000 | 500 | p15[2] |
| 54325 | HMI 24000W/DXS | No | 24,000 | 280 | 86 | S30 | 6000 | 90 | 50 | 2,300,000 | 500 | p15[2] |

[1]The color temperature will vary based on the ballast used and its operating frequency.

[2]Operating Positions: p = horizontal position, s = vertical position with base down, p or s is followed by the number of degrees the lamp can be tilted from the original axis position to maintain optimal performance.

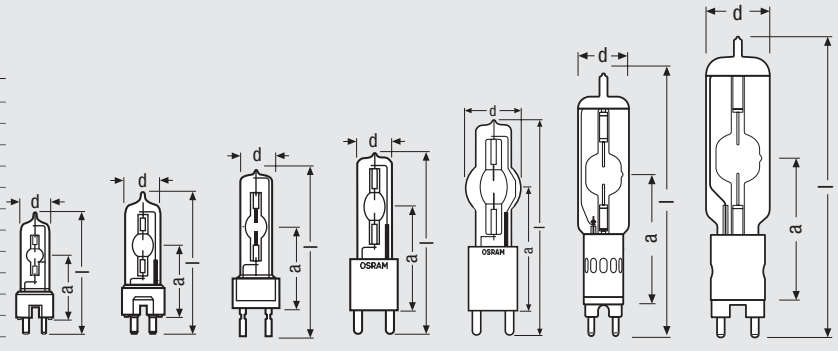
## Ordering Guide

| HMI | / | 1200W | / | SE | / | XS |
|---|---|---|---|---|---|---|
| HMI Lamp | | Wattage | | SE: Single End<br>S: Short Double End<br>DXS: Double End with e**X**treme **S**eal technology | | XS: e**X**treme **S**eal technology |

## Dimensions

**SINGLE END**

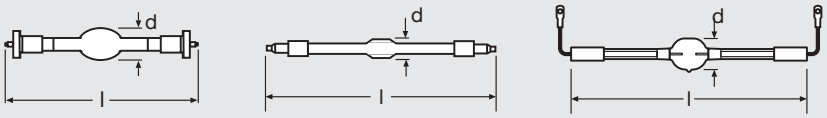
| Ordering Abbreviation | Figure | MOL (l) mm | Diameter (d) mm | LCL (a) mm |
|---|---|---|---|---|
| HMI 200W | 1 | 80 | 19.2 | 39 |
| HMI 400W | 2 | 110 | 23 | 60 |
| HMI 575W | 3 | 145 | 30 | 70 |
| HMI 800W | 3 | 145 | 30 | 70 |
| HMI 1200W | 4 | 200 | 40.4 | 107 |
| HMI 1600W | 3 | 175 | 38 | 107 |
| HMI 1800W | 4 | 200 | 40.4 | 107 |
| HMI 2500W | 4 | 225 | 60 | 127 |
| HMI 4000W | 5 | 250 | 75 | 142 |
| HMI 6000W | 6 | 360 | 75 | 210 |
| HMI 9000W | 6 | 380 | 80 | 210 |
| HMI 12000W | 6 | 455 | 100 | 255 |
| HMI 18000W/SE GX51 | 7 | 495 | 100 | 260 |



1 2 3 4 5 6 7

**DOUBLE END**

| Ordering Abbreviation | Figure | MOL (l) mm | Diameter (d) mm |
|---|---|---|---|
| HMI 575W/DXS | 8 | 135 | 21 |
| HMI 1200W/DXS | 8 | 220 | 27 |
| HMI 2500W/S/XS | 9 | 210 | 32 |
| HMI 2500W/DXS | 9 | 355 | 32 |
| HMI 4000W/DXS | 9 | 405 | 36 |
| HMI 6000W/DXS | 10 | 450 | 54 |
| HMI 12000W/DXS | 10 | 470 | 64 |
| HMI 18000W/DXS | 10 | 500 | 77 |
| HMI 24000W/DXS | 10 | 500 | 83 |



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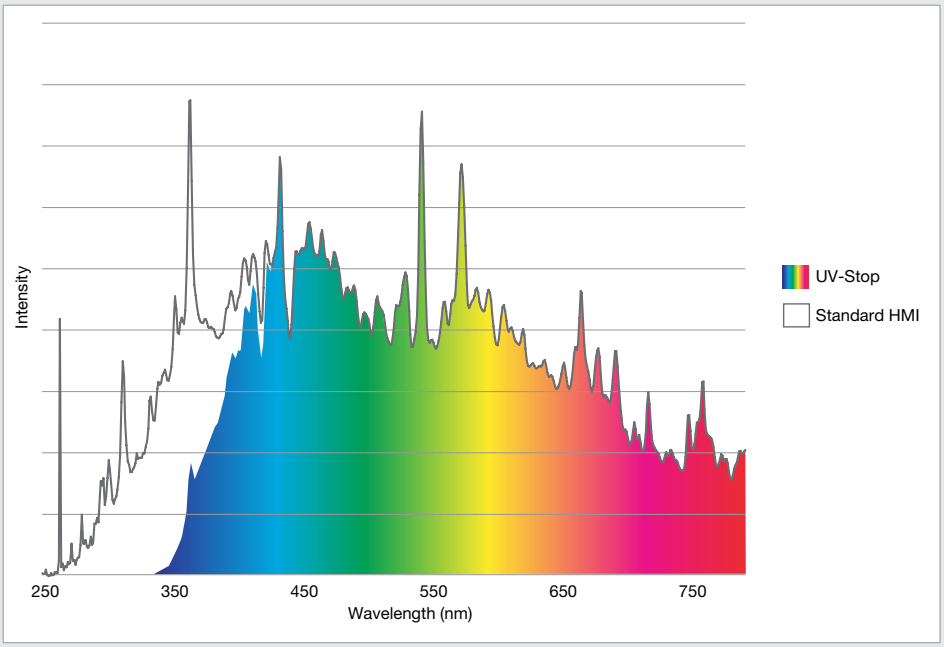
## Technical Information

**Spectral Power Distribution**
**800 watt version shown as an example**

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