



POWERSTAR HQI®-TS 1000 W
POWERSTAR HQI®-TS 2000 W

LIGHT – PURE POWER

THERE IS LIGHT. AND THERE IS OSRAM.

OSRAM



POWERSTAR HQI®-TS

CHAMPIONS IN THE SPOTLIGHT

Metal-halide lamps have long been the lamps of choice for state-of-the-art floodlighting in stadiums and other large sporting venues. When it comes to output, colour rendering and lamp life they leave other light sources way behind. OSRAM was the first manufacturer to use this technology back in 1972 at the Munich Olympic Games. And at the Olympic Games in Sydney, billions of television viewers saw top sporting action in Stadium Australia thanks to lighting from OSRAM.

LESS IS MORE: GREATER EFFICIENCY WITHOUT AN OUTER BULB

Thanks to ongoing developments in technology it has been possible to dispense with the outer bulb on metal-halide lamps. This means that the double-ended sleeveless POWERSTAR HQI®-TS lamps from OSRAM now take up less space but still provide the same output. The new long-arc lamp POWERSTAR HQI®-TS 2000 W/N/L for example provides 100% lumen output from only 5% of the original lamp volume.

REDUCED CONSTRUCTION COSTS

By miniaturising the light source in this innovative way, new standards have been set for more efficient and more economic floodlighting systems. Smaller lamps mean smaller spotlights. Floodlighting systems are therefore more compact, have a significantly lower wind load and considerably reduce the construction costs for masts and foundations.



20% FEWER SPOTLIGHTS

POWERSTAR HQI®-TS lamps with their extremely short arc are close to the ideal of a point light source and can be easily directed. This significantly increases the luminaire efficiency. Greater efficiency also comes from using 20% fewer spotlights in the floodlighting system.

*Fit for the Olympics:
POWERSTAR HQI®-TS metal-
halide lamps from OSRAM
have won over the world with
their outstanding performance.*

*Reducing the wind load with compact
spotlights thanks to HQI®-TS.*

POWERSTAR HQI®-TS

GOOD ALL ROUNDERS

OSRAM developments have increased the range of applications for metal-halide lamps:

- POWERSTAR HQI®-TS 1000 W/D/S and 2000 W/D/S (S = short arc) lamps in Daylight are the first choice where TV lighting and precise direction are critical.
- The POWERSTAR HQI®-TS 1000 W/NDL/S short-arc lamp is an Neutral White DE LUXE addition to OSRAM's Daylight range. It offers excellent colour rendering and is an attractive option for large indoor applications e.g. exhibition halls.
- The POWERSTAR HQI®-TS 2000 W/N/L with its long arc, Neutral White light colour and very high luminous efficacy of 107 lm/W is ideal for new, simply constructed and cost-effective floodlights for semi-professional sporting events, large sites and building facades.



Leading the way with lighting architecture: POWERSTAR HQI®-TS for indirect lighting with modern reflector systems.

Eye catching: effective, impressive lighting for buildings using POWERSTAR HQI®-TS.





POWERSTAR HQI®-TS 2000 W/D/S

POWERSTAR HQI®-TS 2000 W/N/L

*Record breaking:
POWERSTAR HQI®-TS
lamps are impressive for
their precise directional
light and TV-friendly
illumination.*

POWERSTAR HQI®-TS 1000 W/NDL/S
POWERSTAR HQI®-TS 1000 W/D/S
POWERSTAR HQI®-TS 2000 W/D/S

SHORT AND CONCISE: STRAIGHT TO THE

NEW PRECISION FOR PERFECT ECONOMIC FLOODLIGHTING

Thanks to their extremely short arc of only 32 mm, the short-arc lamps behave as point light sources. They can be precisely positioned in optical systems housed in compact spotlights. Their light can be accurately focused. The result is more light where it is needed, and less glare for spectators, residents and drivers.

OPTIMUM LIGHT FOR TV BROADCASTING

Short-lamp arcs provide highly focused light. Spotlights with a beam angle of 3° cover large distances and provide ideal lighting for television cameras over a wide area. The excellent colour rendering properties of the Daylight (colour rendering group 1A) and Neutral White DE LUXE (Group 1B) light colours, are also important characteristics for TV broadcasting.

POWERFUL LIGHT - NOT JUST FOR SPORTS STARS

POWERSTAR HQI®-TS lamps from OSRAM are record breakers outside the stadium too. They contribute to safety at airports in indirect glare-free, high-intensity systems for apron lighting. They create strong accents in professional architectural lighting. They illuminate industrial areas and thanks to their daylight spectrum are used in solar simulation and materials testing.

POWERSTAR HQI®-TS 1000 W/NDL/S lamps are more pleasing to the eye thanks to their warm light colour at low illuminance. In addition to outdoor applications, they are being increasingly used for innovative indoor lighting solutions. Examples include reflector and optical waveguide systems.

Leading the way: Indirect glare-free high-intensity systems with POWERSTAR HQI®-TS contribute to safety.



POINT

COMPATIBLE AND EASY TO USE

Compact HQI®-TS lamps without outer bulbs can be used with conventional control gear. If the existing control gear in a system is still in good working order, such as the control gear installed at the foot of a mast, then only the spotlights need to be changed. The lamps are connected via cable lugs with high contact stability.

HOT RESTART

Hot restart is possible with the POWERSTAR HQI®-TS short-arc lamp thanks to a special igniter.





POWERSTAR HQI®-TS 2000 W/N/L

LONG ARC, HIGHER LUMINOUS EFFICACY

**100% LIGHT FROM
5% VOLUME**

In combination with trough reflectors, the long arc (120 mm) of the POWERSTAR HQI®-TS 2000 W/N/L provides a uniformed flood-lighting for wide-area illumination. Like the short-arc version, the long-arc metal-halide lamp has no outer bulb, so luminaire systems can be made more compact and cost-effective.



Little and large: The impressive difference in size proves that output is no longer a question of volume. With just 5% of the lamp volume, the POWERSTAR HQI®-TS 2000 W/N/L produces the same lumen output as the single-ended POWERSTAR® lamps of the sleeve bulb generation.



POWERSTAR HQI®-TS
– brilliant performance
right from the start.

LONG TERM ECONOMY

The long-arc lamp with its high luminous efficacy of 107 lumen per watt is used in high-efficiency floodlights. With its Neutral White (N) light colour, good colour rendering ($R_a > 65$) and excellent system costs, the POWERSTAR HQI®-TS 2000 W/N/L has entered areas of application that were previously the domain of sleeve bulb lamps: in the semi-professional sector of sports arena lighting and for floodlighting training venues, industrial estates and building facades.

EXCELLENT LUMINOUS FLUX MAINTENANCE

High-pressure discharge lamps in the Neutral White (N) light colour are often based on NaSc technology. Although the initial luminous flux is high it drops off significantly over the life of the lamp. Those looking for good luminous flux maintenance will welcome the fact that the new long-arc lamp is based on the tried and tested filling technology of single-ended POWERSTAR® lamps with sleeve bulbs.

The advantage is, that for a slightly lower initial luminous flux compared with NaSc lamps, the drop-off rate is considerably lower over the life of the lamp. POWERSTAR HQI®-TS long-arc lamps are used with conventional control gear. Hot restart is **not** possible.

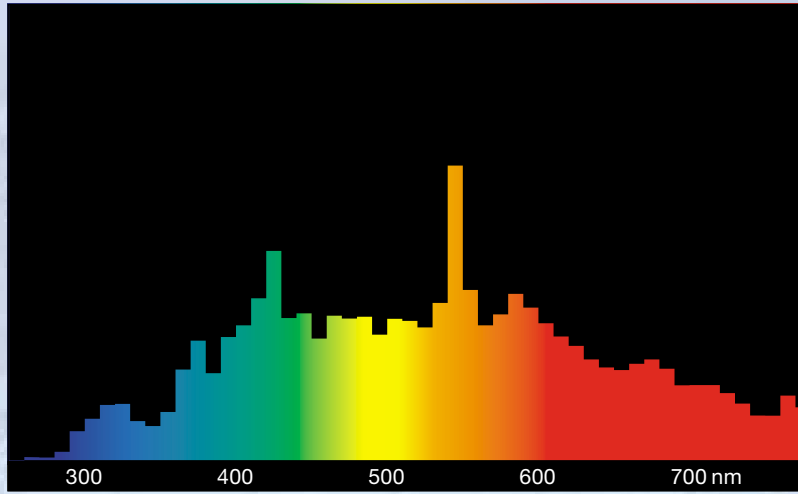
**INNOVATIVE TECHNOLOGY,
DESIGNED TO MEET
YOUR REQUIREMENTS**

**TV-FRIENDLY TRUE-
COLOUR SPECTRUMS**

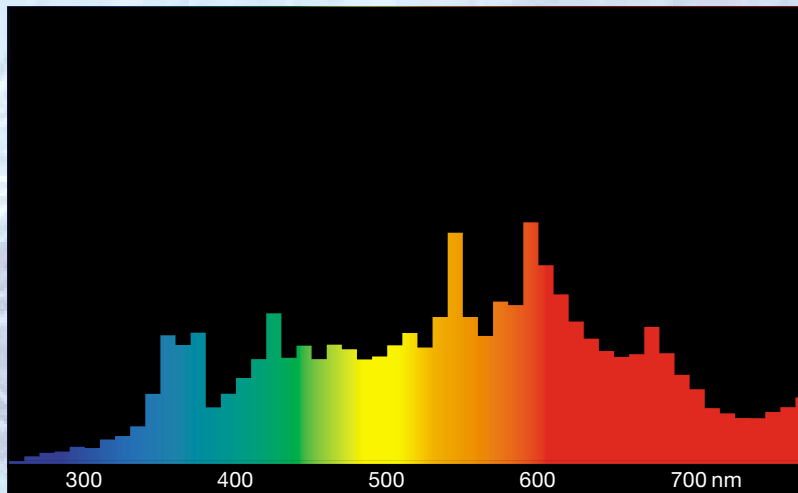
Perfect lighting quality for TV and natural colour rendering showing the finest nuances are provided by the virtually constant spectrums of POWERSTAR HQI®-TS lamps in the Daylight (D) light colour – colour rendering group 1A very good, $Ra \geq 90$.

HQI®-TS in Neutral White DE LUXE (NDL), colour rendering group 1B ($Ra \geq 85$), meets the equally high demands in terms of quality of light.

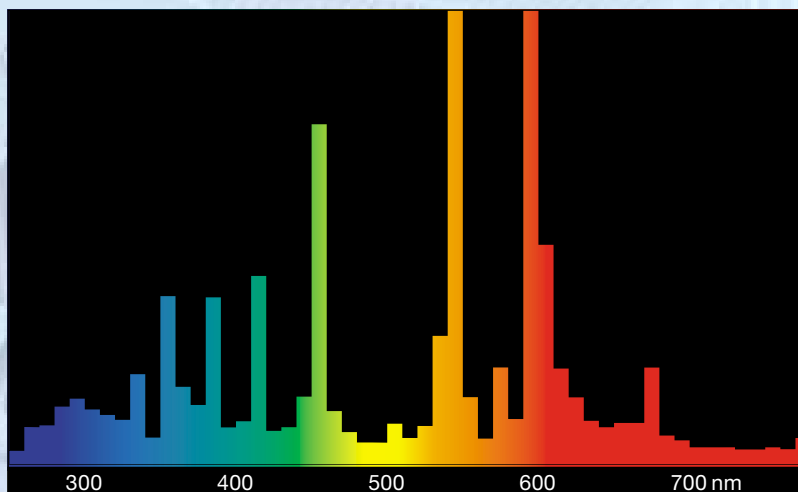
Even the POWERSTAR HQI®-TS 2000 W/N/L long-arc lamps in Neutral White, group 2B ($Ra > 65$), provide good quality light for demanding visual work.



POWERSTAR HQI®-TS 1000/2000 W/D/S



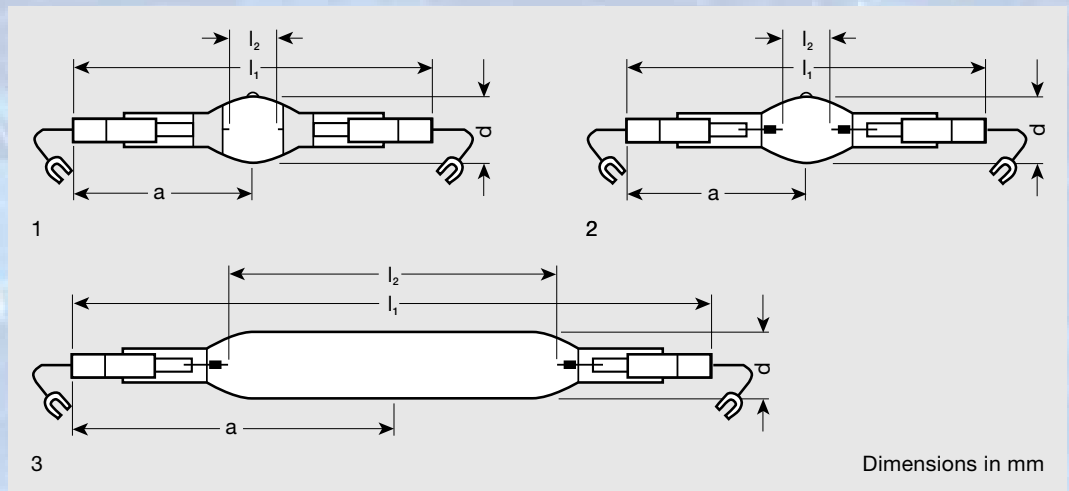
POWERSTAR HQI®-TS 1000 W/NDL/S



POWERSTAR HQI®-TS 2000 W/N/L

DETAILED TECHNICAL INFORMATION FOR LUMINAIRE DESIGN

Technical information can be obtained from your OSRAM sales partner on request. Your OSRAM sales engineer will be happy to offer any further advice.



TECHNICAL DATA

Short-arc lamp	POWERSTAR HQI®-TS 1000 W/NDL/S	POWERSTAR HQI®-TS 1000 W/D/S	POWERSTAR HQI®-TS 2000 W/D/S
Reference	HQI-TS 1000/NDL/S	HQI-TS 1000/D/S	HQI-TS 2000/D/S
Wattage	1000 W	1000 W	1950 W
Luminous flux	90000 lm	90000 lm	200000 lm
Diameter d	36 mm	36 mm	36 mm
Length max. l_1	187 mm	187 mm	187 mm
Distance a (LCL)	93 mm	93 mm	93 mm
Lamp arc length l_2	32 mm	32 mm	32 mm
Colour temperature	5800 K	5900 K	4400 K
Base	Cable	Cable	Cable
Standard pack	10 pieces	10 pieces	10 pieces
EAN 4050300	349916	300092	271682
Fig. number	1	1	2

Long-arc lamp POWERSTAR HQI®-TS 2000 W/N/L

Reference	HQI-TS 2000/N/L
Wattage	2100 W
Luminous flux	225000 lm
Diameter d	32 mm
Length max. l_1	268 mm
Distance a (LCL)	134 mm
Lamp arc length l_2	120 mm
Colour temperature	4100 K
Base	Cable
Standard pack	10 pieces
EAN 4050300	607344
Fig. number	3

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