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Tungsten Smart-Heat Portable vs. The Traditional Patio Heater

WA BROMIC **SMART-HEATING** A CROSS COMPARISON.

TUNGSTEN SMART-HEATTM PORTABLE

TRADITIONAL MUSHROOM PATIO HEATER

- 200FT² HEATING AREA
- TRUE INFRARED RADIANT HEAT
- HIGHER HEAT OUTPUT
- EFFICIENT DIRECTIONAL HEAT
- HIGHEST WIND RESISTANCE
 AVAILABLE
- STABLE WEIGHTED BASE
- HIGH-QUALITY STAINLESS STEEL
- AWARD WINNING DESIGN





red<mark>dot</mark> design award

- 75FT² HEATING AREA
- OUTDATED CONVECTION HEATER
- INEFFICIENT HEATING
- 75% VERTICAL HEAT LOSS
- EASILY EXTINGUISHED BY WIND
- UNBALANCED STRUCTURE
- CHEAP MATERIALS
- BLAND, GENERIC DESIGN





Radiant Heat vs Convection Heat

In simple terms, heating involves the transfer of thermal energy - the energy created as a result of an object's temperature - from one body to another. Outdoor heaters utilize one of two different methods to transfer thermal energy: convection and radiant heat.

Traditional patio heaters primarily rely on convection heat, a process that occurs when warm air meets colder air. A convection heater operates in a similar fashion to a hair dryer, emitting hot air that mixes with ambient air to raise the average temperature of an area. The heating output of a convection heater is heavily impacted by drops in ambient temperature and can be whisked away by wayward winds.

The Tungsten Smart-Heat[™] Portable delivers heat directly from its purpose-designed ceramic burners to the intended target in a style similar to the sun heating the earth via infrared radiant heat. Rather than heating air, radiant heaters heat the target objects themselves as they come in to contact with waves of infrared light. This makes radiant heat the ideal method for outdoor heating, as it does not rely on the movement of hot air that can easily be dispersed.

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Wind Resistance

Relying on a large surface area of flame and minimal shielding to stay alight, traditional patio heaters are heavily affected by weather. Light winds push heating output unevenly to one side of the burner while gusts of as little 3.5mph are enough to extinguish the flame entirely.

The Tungsten Smart-Heat[™] Portable hides its patented gas injection and burner system behind curved mesh designed specifically to filter wind, able to stay reliably lit with unaltered heat distribution in winds of up to 8mph.

Safety

Both units feature a mercury tilt switch to automatically cease gas supply should they leave an upright position, but the Tungsten Smart-Heat[™] Portable also employs redundant twin thermocouples to do so in the event of sudden flame loss. These features insure against the dangerous accumulation of unlit gas, as does the Tungsten Smart-Heat[™] Portable's superior repetitive spark igniter, providing a number of sparks a second at the push of a button.



Fewer Tungsten Portables required means seamless integration into any venue

Design

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The Tungsten Smart-Heat[™] Portable is a shining beacon of beauty in a desert of drab design, drastically different to anything else on the market. As a tasteful alternative to the ubiquitous traditional patio heater, this unit fits contemporary outdoor styling and can be included as a stylistic addition rather than a simple necessity. Industry experts have welcomed this long-needed shake up of the portable outdoor heating sector, with the Tungsten Smart-Heat[™] Portable already accruing the 2015 Red Dot Award in Product Design and the 2014 Good Design® award.











Ergonomics

Ease-of-use is a big part of Bromic Heating's design principle, with the Tungsten Smart-Heat[™] Portable designed to suit the needs of the end-user. Intuitive soft-touch controls inspired confident input in low light conditions while the in-built wheels pivot the weight of the unit directly over itself for effortless movement. Gas bottle replacement involves minimal lifting and should you wish to store or transport the unit, its modular design allows hassle-free deconstruction and re-assembly.

Stability



Traditional patio heaters are incredibly unstable, relying on the weight of a gas bottle to counterbalance their top-heavy frame. This poses a serious tipping hazard should a passer-by bump the unit, or a strong wind catch the large heat shield above. Bromic Heating recognised this risk and have done their best to reduce it, with the Tungsten Smart-Heat[™] Portable's stylish upper half designed to avoid areas capable of catching strong gusts. Furthermore, this unit is able to self-recover from a tilt of up to 22°, far exceeding the 15° dictated by 'Appliance Stability' standards ANSI Z83.26 and CSA 2.37 required for sale in the U.S. and Canada.



SINGLE TUNGSTEN PORTABLE IN A LARGER AREA

Efficiency

The Tungsten Smart-Heat[™] Portable is a leap forward in efficiency for outdoor heating, consuming the same amount of fuel to produce raw heating power comparable to a traditional patio heater, but spread over three times the area. The price gap between these units quickly shrinks when one considers the need to buy three inferior products, accompanied by trebled fuel usage, to match the performance of a single Tungsten Smart-Heat[™] Portable.

Durability

The marketplace is crowded with copycat patio heaters, constructing units around a stagnant design with a huge gradient in quality between manufacturers. Bromic Heating manufactures their entire Smart-Heat[™] range in-house with a strong focus on quality control. Our highly-skilled engineers use the finest materials to ensure durability, reliability and longevity that our customers can depend on. MULTIPLE PATIO HEATERS IN A

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Directional Heat



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Directional Heat vs Spherical Heat

Relying on a large gas burner similar to that found in a BBQ, traditional patio heaters emit heat in a sphere as surrounding air comes in to contact with the open flame. A large percentage of this heat is lost vertically as the hot air naturally rises. Some heat is emitted downwards but due to this spherical style of heat emission, traditional patio heaters must be placed in the centre of a desired area to have any effect on those crowded closely around it.

Employing direct gas injection in a similar method to traditional patio heaters, Bromic's Tungsten Smart-Heat[™] Portable uses this flame to heat a radiant ceramic element that efficiently and precisely projects heat. The increased efficiency of directional heating becomes more pronounced as distance is increased, as demonstrated by our contrast of these two styles. Directed by the adjustable head, radiant heat can reach as far as 16-feet into an open space with an impressive 13-foot spread, offering an unparalleled gradient of heat from the head to its furthest reaches.

Spherical Heat

As tested by Bromic certified engineers

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