

ZR 22 STD Specifications

Heater size

- ☞ 1500w

Total power consumption

- ☞ 7.2A @ 220-240v
- ☞ 14.4A@ 110v

Fuse rating

- ☞ 10A @ 220-240v
- ☞ 20A @ 110v

Heat up time

- ☞ 8 mins

Operation time

- ☞ Continuous

Over-heat protection

- ☞ Direct Thermal Protection Device

Controller supplied

- ☞ Jem Multifunctional remote control

Control Options

- ☞ 0-10v input

DMX input

- ☞ N/A

0-10v input

- ☞ Use remote Din socket Pin 2 GND and Pin 5, 0-10v input. This pin needs 1.5v to heat the machine and 2-10v to run the pump when up to working temperature.

Analog link

- ☞ Standard via 3 pin XLR socket

Fluid capacity

- ☞ 9.5 litre

Recommended fluid

- ☞ Pro Smoke Studio (DX Mix)
- ☞ Pro Smoke Super (ZR Mix)
- ☞ Pro Smoke Super (Fragranced)
- ☞ Pro Smoke High Density (SP Mix)

Fluid consumption (max.)

- ☞ 120ml/min
- ☞ 0.031 Imp. gallon/min

Fluid level sensing

- ☞ N/A

Input fluid pipe diameter

- ☞ 2x O/D 4mm

Smoke Output (max.)

- ☞ 850 cubic metres/min
- ☞ 30,017 cubic feet/min

Dimensions of Machine

- ☞ 670mm x 275mm x 250mm

Dimensions when boxed

- ☞ 810mm x 380mm x 390mm

Weight (no fluid)

- ☞ 18kg

Weight (with fluid)

- ☞ 27kg

Flying kit

- ☞ Optional inc. drip tray

Drip tray

- ☞ Optional

Installation

- ☞ The machine should be located in a well-ventilated area with a minimum of 200mm air space around the sides and top of the machine. The machine should only be used on level surfaces. The initial smoke output of the machine is hot, so the front of the machine should at least 1 metre from surfaces or people. Never leave the machine running unattended. Do not install above people's heads.

Ducting kit	Output nozzle size
☞ Optional 4 " flexible inc. adapter	☞ 75mm dia.
Max length of remote cable	Accessories
☞ 50 metres (5 metres supplied)	☞ 4 " Flexible Ducting System inc. Adapter
	☞ Flying kit inc. drip tray
	☞ Drip tray

Sample project specification

☞ **Description**

This streamline version of the ZR22-DMX offer many of the same features yet was designed for those who do not require a DMX interface.

- ☞ **Soft Start Electronics** The "crack" created during the initial burst of smoke is caused by the pump pressure overcoming the incredible back pressure of the heat exchanger. Jem's unique Soft Start Electronics gradually powers the pump, eliminating this crack and ensuring a quieter and smoother operational level following initial start up.

☞ **Heat exchanger (1500Watts)**

All Jem heat exchangers are designed for high efficiency performance. Only the purest grade LM24 aluminum is used in the production process which eliminates the risk of porosity (pockets of gas within the casting which can cause heater failure). All heat exchangers contain cuprous helicoils of at least 2.8 meters in length, ensuring a continuous flow of pure, dry, white smoke.

☞ **Electronic Pump Ramping (EPR)**

Jem was the original pioneer of EPR, an intelligent means of warning of a drop in temperature which could result in 'wet smoke' (residue). The pumps respond to this signal by running slower and pumping less fluid, thus allowing the heaters to restore optimum operational temperature. This guarantees a continuous flow of smoke using highly efficient, lower wattage heaters.

☞ **Jem Multifunctional Remote**

This reliable remote offers more than the usual auto timer and smoke level output controls. Easily engaged, the timer gives complete adjustment for both 'Fog On' and 'Fog Delay' modes. These timer functions can be expanded even further by engaging Jem's unique '8X Mode' which multiplies the selected timer setting by eight.

☞ **On-Board Remote System**

Greatly appreciated by rental companies, this hand-held remote can be stored during transit on-board the machine, making it easy to find at show time and eliminating transit vulnerability. But storage isn't the only advantage. Portability is greatly enhanced by having on board controls.

☞ **Direct Thermal Protection Device (DTPD)**

This small yet crucial component is the last line of defense against catastrophic failure. Other manufacturers still depend on cheap plastic whereas Jem's DTPD is made from a solid ceramic composite. This guarantees extremely precise overheat monitoring and is unaffected by ambient temperature changes.

☞ **D-Tec Vaporizing System**

This unique system produces a very high smoke output using a relatively low wattage

heat source. The secret is its high alluvial mass and its twin, cuprous, oval helicoils. 3.5 meter helicoils and precision casting ensure maximum heat exchange between the efficient 1500-watt heater and the twin fluid carrying coils.

☞ **Max Power Consumption**

7.2 @ 220v

14.4A @ 110v

☞ **Maximum Smoke Output**

850 cubic metres/min

30,017 cubic feet/min

☞ **Fluid container**

All Jem smoke, haze and heavy fog machines are designed to carry removable fluid containers of varying sizes depending on the models application. The removable container makes for quicker refills and protects the machine from damage through spillage in transit.

☞ **Maximum Fluid Consumption**

120ml/min

0.031 Imp. gallon/min

☞ **Accessories**

Ducting system

Flying kit inc. Drip tray

5 metre remote cable

☞ **Included items**

Jem Multifunctional remote control

9.5 litre fluid container (empty)

Instructions for use manual

☞ **Recommended fluids**

Pro Smoke Studio (DX Mix)

Pro Smoke Super (ZR Mix)

Pro Smoke Super (Fragranced)

Pro Smoke High Density (SP Mix)