## **PRINCIPLES OF INFRARED HEATING**

A well-controlled environment is essential in the first days of a bird's life. Experts agree infrared heat produced from gas fired heaters (brooders) provide young birds with their best start. Infrared heat allows you to aim the radiant heat directly to the animals and the floor.

#### Advantages:

- Radiant heaters have the ability to heat without contact or air movement.
- Radiant heaters provide virtually instant warmth to animals regardless of the ambient temperature. This is accomplished by the emission of electromagnetic waves that when intercepted and absorbed are converted directly to heat.
- Radiant heaters can be easily and precisely controlled.
- Radiant heaters have a high efficiency, which leads to lower fuel cost.
- Radiant heaters produce humidity, positively effecting bird health.
- Radiant heaters create comfort zones for individual bird comfort.
- Radiant heaters are zone controllable, enabling zone control and providing even heating throughout the house.
- using radiant heaters greatly reduces the chances of malfunction disasters.

#### **M-HEATER**

**POULTEC** popular M-Series heaters have earned a proven position in today's spot heating market. Excellent performance, rigid durability and simple straight forward design, with no moving parts.

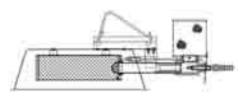
**POULTEC** delivers several versions of the M-heater from small to big: M2, M3, M5 and M8. The smallest has a maximum capacity of 1 kW/hour, while the biggest has a maximum capacity of 5 kW/hour. This makes the system suitable for every market need. An electric ignition version of the M-series heaters is also available.

The M series heaters come standard with a stainless steel mesh filter. A heavy-duty fabric filter is available for extreme conditions. It 'filters' the air better and reduces the amount of cleaning work for the farmer.

Advantages:

- Stainless steel construction
- Wide operating range
- Energy efficient
- Reliability
- Low maintenance
- Withstands high pressure washings

#### M-Heater



Specifications M8		
Capacity	5,0 kW/hour	17.300 BTU/hour
Operating pressure	5-310 mabr 20-1400 mbar	0,07-4,50 psi 0,28-20psi
Gas types	propane, Butane, LPG, Natural Gas	
Heat range	6 meter	19 feet
Hanging height	0,9-1.50 m.	35-59 in.
Distance to combustible materials	lmeter	39 in.

Electectronic

Typical installation Lay-out

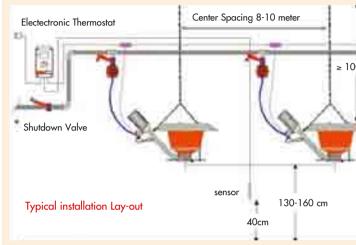
Thermostat

Shutdov

Valve

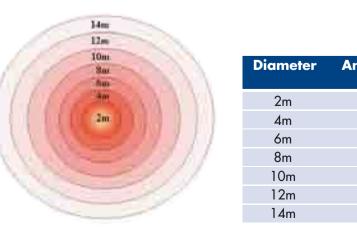
## **G-HEATER**

Latest innovation in radiant heating, designed to reply to the needs and wants of modern poultry production, G 12 is a 12kW / 42,000 Btu infrared radiant heater that projects a larger heat pattern with minimal use of fuel and maintains the simplistic design POULTEC is known for.



Specifications G12		
Capacity	12,2 kW/hour	42.000 BTU/hour
Operating pressure	22-28 mabr	9-11 in. w.c.
Gas types	propane, Butane,	LPG, Natural Gas
Heat range	12 meter	39 feet
Hanging height	1.40-1.75 m.	62-69 in.
Distance to combustible materials	1,5 meter	59 in.

#### Heat pattern of a Gasolec G12 Heater





Center Spacing 6-6,5 meter

20

senso

10-25 cm

0,9-1,5 meter

> 60 cm





# Advantages:

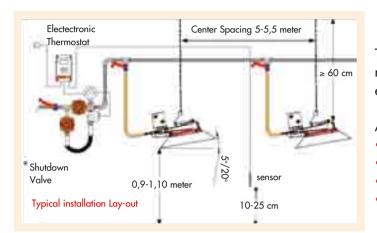
- 90% of the emitter surface is intact, providing maximum infrared output
- Canopy designed to maximize the spread of the infrared warmth outwards
- Available with pilot or electric ignition
- Unique pilot guard design eliminates pilot flame blow outs (e.g. tunnel ventilation)
- Low maintenance
- Standard with a heavy-duty dust filter
- A safety catch plate mounted to the bottom
- Optimum air intake for clean burning and low emissions

nbient temp.	Temp. of 1xG12 after min. of heating measured on the floor
17°C	33°C
17°C	26°C
17°C	23°C
17°C	21°C
17°C	21°C
17°C	21°C
18°C	21°C

### **S-HEATER**

The S-heater is made with a cast iron burner house and ceramic plate. A successful heater still considered as a good, cheap and reliable brooder for your animals.

**POULTEC** delivers several versions of the S-heater: from small to big: S2, S4 and S8. The smallest has a maximum capacity of 0.88 kW/hour, while the biggest has a maximum capacity of 3.5 kW/hour. This makes a system that is more suitable for smaller scale rearing units.





The S series heaters come standard with a stainless steel mesh filter. A heavy-duty fabric filter is available for extreme conditions.

High/ Low Gas Controller

Low heat adjustment regul

High heat adjustme

regulator

Advantages:

- High Infrared output
- Portable & easy to install
- Low maintenance
- Durability: in production over 40 years

### **REGULATION EQUIPMENT**

There are different kinds of gas pressures. POULTEC has available 3 different types of regulating systems to regulate the heaters.

Manual regulators

Automatic regulating systems:

- High/Low regulating systems
- Stepless regulators

Manual regulators are used for all our heaters: they enable manual adjustment of the gas pressure by the farmer. They require the presence of the farmer to adjust the gas pressure when this is needed.

Automatic heating systems are able to adjust the heat output of the heaters without the presence of a farmer. Both the high/low regulating systems and the stepless regulators are used for the M and S series.

The high/low regulating system is designed to have the heaters work on a minimum (low) or on a maximum (high) burning position.

The stepless regulator is designed to have the heaters burn at all levels of the available pressure range.

Both high/low and stepless regulating systems function through the signals of a thermostat or a climate computer.



Poultec supplies several types of thermostats to measure the temperature development in the house at the height of the bird's heads. We are not necessarily measuring the ambient temperature, but what the birds are feeling. The TD1-15 Electronic Digital Thermostat is one of our most accurate thermostats. The specially designed infrared sensor can sense temperature changes within one half degree.

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