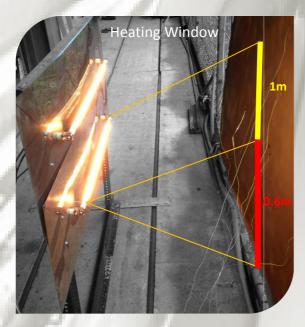
Fannon goldenrod infrared (IR) lamp high efficiency heating, fast respond offer end users the most cost effective method of infrared heating especially recommend for paint curing in automotive industry and heating flame sensitive material such as paper, MDF, plastic, rubber and ect.

- Virtually 100% of the infrared energy is directed toward the object being heated with minimal waste
- High-intensity IR short-medium wave match the absorption bands of most organic materials
- Fast respond & instant on-off in 1 sec
- Goldback offers 23.5% more efficient than a standard quartz
  lamp which efficiency will drop 60% after reflector become dirty



Our standard is GVT531101 plus IA-43:

Power Input	2,500 Watt	
Voltage / Current	220-240 V / 10 A	
Lamp diameter	5/8"	
Overall length	788 mm	
Heating length	635 mm	
Connecting	2 x Ceramic fuse clip	







Single Goldenrod Emitter					
Heat up from 30°C to	Distance from Lamp				
	0.7m	1.0m	1.5m		
40°C	110s	180s	390s		
50°C	140s				
60°C					

Double Goldenrod Emitters					
Heat up from 30°C to	Distance from Lamp				
	0.7m	1.0m	1.5m		
40°C	40s	100s	180s		
50°C	90s	210s			
60°C	180s				

# **Infrared Emitter Selection**



# **Concept Design (Control)**

## The following question must be answered before selection.

How many infrared lamps will be used in the system ? What is voltage supply (3ph/2ph) and maximum current permitted ? How many zones will be divided in the system ? How is accuracy of temperature (±error) be controlled ? How is the project's budget ?

### Manual Control

1. On/Off requires only a breaker per zone for on-off function. The wire size must be selected conformance with load current capacity.

Budget : .....

#### Semi Automatic Control

2. Time Delay requires a breaker, a temperature controller, a non-contact temp. sensor and a timer per zone. When the temperature reach setting point (60°C), the temperature controller will send signal to cut main power off; however, the heater won't be turned-off suddenly. The timer will delay heater switch off which offers dwell time to achieve curing specification. Budget : .....

#### **Fully Automatic Control**

3. High/Low/Off requires two breakers, a temperature controller and a non-contact temp. sensor per zone. In a zone, infrared lamps will be divided into two groups which connect separately to terminal and breaker. During process, both group turnedon normally. When the process temperature meet set point, the first group will be switched off while the other will control temperature constantly. However, if the temperature still go higher, the remaining lamps will be turned-off. Budget : .....

4. SSR Modulation requires a breakers, a temperature controller, a non-contact temp. sensor and a phase angle control per zone. The sensor will send control signal (4-20mA or 0-10VDC) to the SSR phase angle controller for adjusting of current supplied to infrared lamps in the particular zone. The infrared intensity will be moderated to keep constant of surface temperature.

Note : The wavelength will be varied from Long-Medium-Short when its intensity changed. Budget : .....

### For more information, please contact PP Systems Co., Ltd.

49 Soi LuanjueaAnusorn2, Sukhumvit 70/3 Road, Bangna, Bangkok 10260 Office: 02 399 4930, 02 745 4900 Fax: 02 745 2098 Email: satit@ppss.co.th Web: www.ppss.co.th

