

## IRT/C QUICK SELECTION GUIDE

### 1. How Large Is Your Target?

- If it is smaller than 0.8 inches (2 cm), you must select either the IRt/c.01, IRt/c.03, IRt/c.1x, IRt/c.3x, or focused model.
- If it is smaller than 0.3 inches (8 mm) you must select the IRt/c.3x or focused model.
- If it is larger than 0.8 inches (2 cm), select any of the sensors.

### 2. How Close Can The Sensor Be Mounted?

- See Tech Note #36, Tech Note #41, and Tech Note #55 and use the field-of-view drawings showing the distance from the sensor versus the approximate diameters of the spot size.
- For example, the IRt/c.3x, at a distance of 3X has a spot size of 1X (at a distance of 1 foot, the spot size is 4 inches, at a distance of 1.5 meter, the spot size is 0.5 meter).
- See Tech Note #29 if you wish to position an IRt/c at an angle other than 90° from your target surface.
- If using a focused model, refer to individual model specifications for optimum distance.

### 3. What Is The Ambient Temperature Where The Sensor Is To Be Placed?

- If ambient is less than 160°F (70° C) choose any sensor.
- If ambient is less than 212°F (100° C) choose any sensor except IRt/c.01 and IRt/c.03..
- If ambient is greater than 212°F (100° C), see Tech Note #35 for air cooling flow requirements for the IRt/c Cooling Jacket Kit and IRt/c.XXX built-in air purge/cool system.
- If ambient is greater than 500°F (260°C), it is usually best to specify an IRt/c or IRt/c.2 sensor along with the Cooling Jacket Kit and utilize the water cooling feature. (Cooling the smaller sensors with water is less expensive over time, compared to cooling the IRt/c.5 with air.)

### 4. What Is Your Target Temperature?

- Use Temperature Selection Guide. See Tech Note #49.

### 5. Choosing A Temperature Controller/Input Device?

- See Tech Note #37 and Tech Note #14 for help in selecting or using available thermocouple input devices.

#### Exergen Global offices:

The Netherlands  
Pastoor Clercxstraat 26  
5465 RH Veghel  
Tel: +31(0) 413 37 65 99  
Fax: +31(0) 413 37 93 10

USA  
400 Pleasant Street  
Watertown, MA 02472  
Tel: +1 617 649 6322  
Fax: +1 617 923 9911

office@exergenglobal.com  
www.exergenglobal.com