



**ISSPRO**  
**PYROMETER**

# Pyrometers

Pyrometers

Speedometers & Tachometers

Gauges & Senders

Specialty Products & Accessories

Enhanced Visibility (EV) Products

Index & Warranty

## CONTENTS

2 1/16" & 2 3/4" Pyrometers _____	3
Digital Pyrometers _____	3
3" Pyrometers _____	4
3" Dual Pyrometers _____	4
3" Turbocator _____	4
Thermocouples _____	5
Lead Wires _____	5
Thermocouple Accessories _____	5
Multi-Station Pyrometer _____	6
Pyrometer Tester _____	6
Low Temperature Pyrometers, Thermocouples & Lead Wire _____	6



R605



R605C



R605P



R607T



R607



R607G



R607P



R607WW

## Pyrometers

As one of the world's largest suppliers of pyrometers to the heavy duty, marine, automotive and industrial markets, ISSPRO, INC. offers a wide variety of pyrometers specifically for your needs. ISSPRO, INC. can also customize your pyrometer applications.

ISSPRO, INC. offers two types of pyrometer systems:

- The most common is type K (chromel-alumel), designed for high temperature applications (0-2000°F). This is used in most diesel, natural gas and gas engine applications.
- The low temperature system, type J, (iron-constantan) operates in the 0-600°F range. These are used in special applications where manifold head temperature are being sensed instead of exhaust temperature.

### TO DESIGN YOUR OWN PYROMETER SYSTEM, YOU WILL NEED...

- **PYROMETER** - To choose the proper pyrometer, determine the temperature range and size of the mounting hole.
- **LEAD WIRE** - An R660 lead wire must be used with a type K pyrometer. An R653 lead wire is used with a type J pyrometer.
- **THERMOCOUPLE** - Type K for sensing exhaust temperature. (Type J for sensing head temperature).



R607TT



R630



R602



R602I

## 2 1/16" Pyrometers

Use type K thermocouple.

PART NUMBER	°F SCALE	°C SCALE	SWEEP	BEZEL	REMARKS
R611	0-1200°	0-650°	250°	black	
R607G	0-1500°	None	250°	black	
R607T	0-1500°	None	250°	black	pre-turbo color code dial
R607VW	0-1500°	None	250°	black	post-turbo color code dial
R605	300-1500°	200-800°	100°	black	
R605C	None	200-800°	100°	black	
R605P	300-1500°	200-800°	100°	chrome	
R605SC	300-1500°	200-800°	100°	satın chrome	
R607	0-1800°	0-1000°	250°	black	
R607C	None	0-1000°	250°	black	
R607P	0-1800°	0-1000°	250°	chrome	
R607TT	0-1800°	None	250°	black	dial says turbo temp

## 2 1/16" Digital Pyrometers

All units have 0.3" LED displays. Centigrade scales are also available. Consult factory. Alarm output available.

PART NUMBER	°F SCALE	PROBE	BEZEL
R630	0-1990°	type K	black
R630-24VDC	0-1990°	type K	black
R630P	0-1990°	type K	chrome

## 2 3/4" Pyrometers - 3 Hole Screw Mount

Use type K thermocouple.

PART NUMBER	°F SCALE	°C SCALE	SWEEP	BEZEL	REMARKS
R602	0-1800°	0-1000°	100°	black	
R602I	0-1800°	None	100°	black	color coded dial



Pyrometers

Speedometers & Tachometers

Gauges & Senders

Specialty Products & Accessories

Enhanced Visibility (EV) Products

Index & Warranty



R610



R606



R609



R612



R604



R606P



R650



R650A-HT

## 3" Pyrometers

Use type K thermocouple.

PART NUMBER	°F SCALE	°C SCALE	SWEEP	BEZEL	REMARKS
R610	0-1200°	0-650°	250°	black	
R604	0-1800°	0-1000°	100°	black	
R604C	None	0-1000°	100°	black	
R604I	0-1800°	None	100°	satin chrome	color coded dial
R604IC	None	0-1000°	100°	black	color coded dial
R604P	0-1800°	0-1000°	100°	chrome	
R606	0-1800°	0-1000°	250°	black	
R606C	None	0-1000°	250°	black	
R606P	0-1800°	0-1000°	250°	chrome	

## 3" Dual Pyrometers

Use two type K thermocouples.

PART NUMBER	°F SCALE	°C SCALE	BEZEL
R612	0-1200°	0-650°	black
R612P	0-1200°	0-650°	chrome
R624	300-1500°	200-800°	black
R624P	300-1500°	200-800°	chrome

## 3" Turbocator

Dual scales allow monitoring of exhaust temperature on the lower scale and turbo boost pressure on the upper scale. Turbocator kits (R609-6,-10,-14) include tubing, lead wire and thermocouple (R650, type K). 100° sweep. Chrome bezel available.

PART NUMBER	°F SCALE	°C SCALE	BOOST RANGE	BEZEL	REMARKS
R609	300-1500°	None	0-30 psi	black	
R609-6	300-1500°	None	0-30 psi	black	Kit
R609-10	300-1500°	None	0-30 psi	black	Kit
R609-14	300-1500°	None	0-30 psi	black	Kit

**ISSPRO,  
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AT YOUR  
SERVICE  
FOR  
OVER 55  
YEARS!



R650SPL



R660-6



R680



R681

## Thermocouples

Standard temperature – Brass fitting for use in diesel applications. High temperature (designated by HT in part number) – Inconel tip and steel fitting for use in gasoline and propane applications.

PART NUMBER	°F SCALE	TYPE	MOUNTING	PROBE LENGTH	PLUG
R650S	0-1600°	K	1/4" NPTF	1.6"	
R650SPL	0-1600°	K	1/4" NPTF	1.6"	yes
R658S	0-1600°	K	1/4" NPTF	1.6"/ Adjustable	
R658S-8F	0-1600°	K	1/8" NPTF	1.6"/ Adjustable	no
R658SPL	0-1600°	K	1/4" NPTF	1.6"/ Adjustable	yes
R650	0-1600°	K	1/4" NPTF	2.25"	
R650PL	0-1600°	K	1/4" NPTF	2.25"	yes
R658	0-1600°	K	1/4" NPTF	2.25"/ Adjustable	
R658PL	0-1600°	K	1/4" NPTF	2.25"/ Adjustable	yes
R658SHT	0-2000°	K	1/4" NPTF	1.6"/ Adjustable	
R658SHT-PL	0-2000°	K	1/4" NPTF	1.6"/ Adjustable	yes
R650SHT	0-2000°	K	1/4" NPTF	1.6"	
R650SHT-PL	0-2000°	K	1/4" NPTF	1.6"	yes
R650HT	0-2000°	K	1/4" NPTF	2.25"	
R650HT-PL	0-2000°	K	1/4" NPTF	2.25"	yes
R658HT	0-2000°	K	1/4" NPTF	2.25"/ Adjustable	
R658HT-PL	0-2000°	K	1/4" NPTF	2.25"/ Adjustable	yes
R650A-HT	0-2000°	K	clamp	2.25"/ Adjustable	
R650A-HT-PL	0-2000°	K	clamp	2.25"/ Adjustable	yes

## Lead Wires

High temperature extension type lead wire. Ensures accurate readings. Numerical suffix indicates length in feet. Longer lengths are available by special order.

PART NUMBER	WITH PLUG-IN CONNECTOR	REMARKS
R660-6	R660-6PL	
R660-8	R660-8PL	
R660-10	R660-10PL	
R660-14	R660-14PL	
R660-XX	R660-XXPL	ISSPRO lead wires in stock up to 75' call for details

## Thermocouple Accessories

PART NUMBER	FITTING	MOUNTING	REMARKS
R680	Weld bushing	Weld onto exhaust tube for a 1/4" NPTF connection to mount thermocouple	
R681	Compression fitting	Brass, 1/8-27 NPTF	
R682	Compression fitting	Brass, 1/4-18 NPTF	
R683	Compression fitting	Steel, 1/8-27 NPTF	For high temperature applications
R684	Compression fitting	Steel, 1/4-18 NPTF	For high temperature applications
R7980	Fiberglass sleeves		Protects thermocouple leads from shorting to each other

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& Tachometers

Gauges  
& Senders

Specialty Products  
& Accessories

Enhanced Visibility  
(EV) Products

Index  
& Warranty



R647



R654



R6514



R653-3



R616



R600

## Multi-Station Pyrometer

**R647** Multi Station Pyrometer (Diesel) 0-1500 Degree Range

Designed for engine test stands and engine room applications. Will accept up to 16 inputs. These can be individually selected with a rotary switch located on the front of the pyrometer.

**R648** Multi Station Pyrometer (Gas) 0-2000 Degree Range

## Pyrometer Tester

**R600** Pyrometer Tester

The tester is used for testing lead wires, thermocouples and pyrometers.

## Low Temperature (Type J) Pyrometers

Features white face, black numerals, uses type J thermocouple and low temperature lead wire.

PART NUMBER	°F SCALE	°C SCALE	SIZE	BEZEL
R616	0-600°	None	2 1/16"	black
R614	0-600°	None	3"	black

## Low Temperature Thermocouples

PART NUMBER	°F SCALE	TYPE	MOUNTING
R654	0-600°	J	1/4" NPTF
Low temperature probe. Use with low temperature pyrometers and R653 lead wire.			
R6514	0-600°	J	14mm ring
Designed to measure head temperature. Resistant to shock, vibration and temperatures up to 600°F. Installed in place of spark plug gasket and furnished with quick disconnect electrical fitting. Use R653 lead wire.			

## Low Temperature Lead Wires

**R653-(# of feet)** Low temperature iron constantan. Weather pack connector included. 3 feet is standard.