

# 709R Combustion Analyser

Delivering test and measurement advantages for HVAC/R professionals worldwide

## Test the TPI advantage

The Value Leader™  
www.tpieurope.com  
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HANDHELD OSCILLOSCOPES

DIGITAL MULTIMETERS

DIGITAL CLAMP-ON METERS

DMM & CLAMP-ON  
ACCESSORIES

CO ANALYSERS

COMBUSTION EFFICIENCY  
ANALYSERS

COMBUSTIBLE GAS DETECTORS

GAS DETECTION ACCESSORIES

DIGITAL MANOMETERS

REFRIGERANT LEAK DETECTORS

TEMPERATURE INSTRUMENTS

INFRARED NON-CONTACT  
THERMOMETERS

POCKET DIGITAL  
THERMOMETERS

DIGITAL VACUUM GAUGE

ELECTRICAL TESTERS

HUMIDITY TESTERS

AIRFLOW TESTERS

SERVICE & CALIBRATION

ACCESSORIES

Visit  
tpieurope.com  
or call  
01293-530196



## The TPI 709R Combustion Analyser Performs:

### 1) Combustion Analysis

- Check Net/Gross Efficiency
- Adjust CO, CO<sub>2</sub> & Ratio Values
- Check CO<sub>2</sub> & O<sub>2</sub> Values on Appliance

### 2) Differential Pressure

- Adjust Gas/Air Mixture
- Test Air Pressure Switch
- Use for Tightness Testing

### 3) Differential Temperature

- Flow & Return Adjustments
- Balance Radiators
- Check Thermostat & Water Temperatures

### 4) CO Detection

- Highlights CO Spillage
- Indicates areas of High CO Production

\* Warranty Subject to Annual Servicing by TPI Europe Ltd.

## TIME & MONEY SAVING FEATURES!!!!!!!!!!!!

- 3 Year O<sub>2</sub> & CO Sensors.

Longer Life Sensors means only 1 major service during a 6 year period from new.

- Water Trap & Disc Filter as standard on the thermocouple gas sampling probe.

Complete protection from water ingress into 709R.

- In-line Pump Protection Filter as standard.

Stopping dust/dirt ingress into pump (the main cause of pump/analyser failure)

**See Overleaf for Accessories & Specifications**

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### Carbon Monoxide (CO) Measurement

Range	0 to 10,000 ppm
Resolution	1 ppm
Accuracy	±5 ppm or 5%, whichever is greater

### Oxygen (O<sub>2</sub>) Measurement

Range	0 to 25%
Resolution	0.1%
Accuracy	±0.3%

### Carbon Dioxide (CO<sub>2</sub>)

Range	0 to 25%
Resolution	0.1%
Accuracy	Calculated

### Ratio (CO/CO<sub>2</sub>)

Range	0 to 0.999
Resolution	0.001
Accuracy	Calculated

### Gross/Net Efficiency

Range	0 to 100%
Resolution	0.1%

### Temperature Measurement

Range	-40° to 800° C (-40° to 1472° F)
Resolution	1°C or F
Accuracy (K-type)	±0.3%, ±1°C or ±2°F

### Draft/Pressure Measurement

Selectable Ranges	mBar, kPa, and inH <sub>2</sub> O
Ranges	-150 mBar to +150 mBar -15 kPa to +15 kPa -60 inH <sub>2</sub> O to +60 in H <sub>2</sub> O
Resolution	0.01 mBar
Accuracy	±0/5% fsd



### Instrument Specifications

Operating Temperature Range	-10° to 50°C (14° to 122°F)
Battery	Rechargeable Ni-MH, >6 Hour Life
Charger Input Voltage	115V or 230V : 50/60 Hz AC
Fuels	Natural Gas, LPG, Light Oil, Heavy Oil
	OPT 1 = Bituminous Coal
	OPT 2 = Anthrachite Coal
	OPT 3 = Coke
	OPT 4 = Butane
	OPT 5 = Wood (Dry)
	OPT 6 = Bagasse
Display	Backlit LCD
Data Storage	50 sets of readings
Time & Date	24 Hour Real Time Clock
Dimensions	200mm x 90mm x 60mm
Weight	500g
Exhaust	Safety Spigot
Conforms To:	BS7927 (and the draft BS7967)

### Standard Accessories

Flue Temperature Probe	A770
'K'-Type Temperature Air Probe	GK11M
In-Line Water Trap Bowl Filter Complete	A795
Mini Pump Protection Filter Assembly	A763
Battery Charger	A766
Protective Boot	A765
Soft Carrying Case	A768
Exhaust Spigot	A764

### Optional Accessories:-

A773 - Oil Filter



A788 - Smoke Test Pump



CK21M - Temperature Pipe Clamps



A746 - 10 Spare Paper Rolls for IR Printer  
Plus Various 'K' Type Thermocouple Probe



To learn more about the vast TPI Product Range visit [www.tpieurope.com](http://www.tpieurope.com)