

# **709R Combustion Analyser**

Delivering test and measurement advantages for HVAC/R professionals worldwide Test the TPI advantage



The Value Leader www.tpieurope.com

Test Products
International, Europe Ltd

Longley House International Drive Southgate Crawley West Sussex RH10 6AQ

Tel: +44 (0) 1293 530196 Fax: +44 (0) 1293 531870 **contactus@tpieurope.com** 

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



## 1) Combustion Analysis

- Check Net/Gross Efficiency
- Adjust C0,C0<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!!!!!!!!!

Long Life 0<sub>2</sub> & CO Sensors.

Long Life Sensors means lower servicing costs 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



# **709R Combustion Analyser**

Delivering test and measurement advantages for HVAC/R professionals worldwide

# Test the TPI advantage

The Value Leader www.tpieurope.com

Test Products International, Europe Ltd

Longley House International Drive Southgate Crawley West Sussex RH10 6AQ

Tel: +44 (0) 1293 530196 Fax: +44 (0) 1293 531870

contactus@tpieurope.com

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

Carbon Monoxide (CO) Measurement			
Range	0 to 10,000 ppm		
Resolution	1 ppm		
Accuracy	±5 ppm or 5%, whichever is greater		
0xygen (0 <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/CO2	2)		
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>0

Ranges -150 mBar to +150 mBar -15 kPa to +15 kPa -60 inH<sub>2</sub>0 to +60 in H<sub>2</sub>0

 Resolution
 0.01mBar

 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