



# 716 Combustion Analyzer

716  
Data Sheet  
06.12

## Test the TPI Advantage

### Features

- QUICK AND SIMPLE SET UP** All TPI analyzers feature quick and simple set up. Fast purge and the ability to perform fuel selection during start up enable tests to be performed quickly without requiring extra set-up time after initial startup. TPI analyzers also use the last selected fuel as the default setting. This feature prevents the need to perform fuel selection every time the analyzer is turned on.
- Built-in differential manometer with 0.001" H<sub>2</sub>O resolution
  - Calculates combustion efficiency
  - Data Logging with time and date stamp
  - Will not shut off if 15 ppm CO is present for increased safety
  - Communicate to a PC via the USB interface
  - Optional A740 IR printer available for hard copies of test results
  - Built-in differential thermometer
  - Store function to save up to 10 readings
  - Pump driven for fast response
  - Push on fittings for fast and easy use
  - Large easy to read backlit display
  - Ten selectable fuels



### Specifications

#### Instrument

Operating Temperature Range	14°F to +122°F (-10°C to +50°C)
Battery / Battery Life	Rechargeable Ni-MH / > 6 Hours
Charger Input Voltage	115V or 230V : 50/60 Hz AC
Fuels	Natural Gas, LPG, Light Oil, Heavy Oil, Bituminous Coal, Anthracite Coal, Coke, Butane, Wood, Bagasse
Units of Pressure	mbar, kPa & inH <sub>2</sub> O
Display	8 line graphical LCD Backlit
Data Storage	100 sets of readings
Data Logging	400 sets of readings
Single Logging	150 sets of readings
Time & Date	24 Hour Real Time Clock
Dimensions	7.8" x 3.5" x 2.4"
Weight	1.1lbs

Gases	Range	Resolution	Accuracy
Oxygen	0-25%	0.1%	+/- 0.3%
Carbon Monoxide	0-10,000 ppm	1 ppm	+/- 5 ppm or 5%
Carbon Dioxide	0-25%	0.1%	Calculated
CO/CO <sub>2</sub> Ratio	0-0.999	0.001	Calculated
Combustion Eff.	0-100%	0.1%	Calculated
Gas Leak Sensor	100-10,000ppm (calibrated to methane)		
* Bluetooth module optional			

#### Pressure Measurement

Selectable Ranges	mbar, kPa and inH <sub>2</sub> O
Range	-120 inH <sub>2</sub> O to 120 inH <sub>2</sub> O
Resolution	0.001 inH <sub>2</sub> O
Accuracy	+/- 0.5% fsd

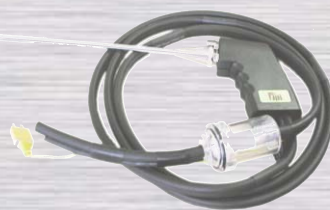
#### Temperature Measurement

Input Type	K-Type thermocouple
Range	-58°F to 1832°F (-50°C to 1000°C)*
Resolution	1°F (1°C)
Accuracy	+/- (0.3% of rdg+2°F) or +/- (0.3% of rdg+1°C)

**A787 Soft Carrying Case**



**A770 Flue Probe**



**GK11M K-type thermocouple**    **A774 Silicone Tubing**



**A776 Static Tip (2)**



**A603 Brass Hose Barb Fitting (2)**



**A611 Gas Valve Pressure Adapter**



**A806 Combustible Gas Leak Probe**



**A791 Adapter tubing**





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## Test the TPI Advantage

Using TPI analyzers to determine combustion efficiency at the time of equipment set up minimizes call backs. Analyzers can be used to verify to the home owner the value of service work by showing the increase in equipment efficiency after work is performed. Efficiency calculations can also be used to generate business by demonstrating the need to improve the efficiency of equipment or to show the benefit of purchasing new equipment with higher efficiency.

**QUICK AND SIMPLE SET UP**  
All TPI analyzers feature quick and simple set up. Fast purge and the ability to perform fuel selection during start up enable tests to be performed quickly without requiring extra set-up time after initial start up. TPI analyzers also use the last selected fuel as the default setting. This feature prevents the need to perform fuel selection every time the analyzer is turned on.

**Gas and Pressure Inlet Ports**

**Charger Socket and USB Port**

**Thermocouple Sockets**

**Infrared Window**

**Exhaust Port**

**Blue Soft Keys:**  
The function of these keys is shown on the bottom part of the display and changes depending on the menu selected.

**Up Arrow Key:**  
Scrolls up and increases values in menus.

**Down Arrow Key:**  
Scrolls down and decreases values in menus.

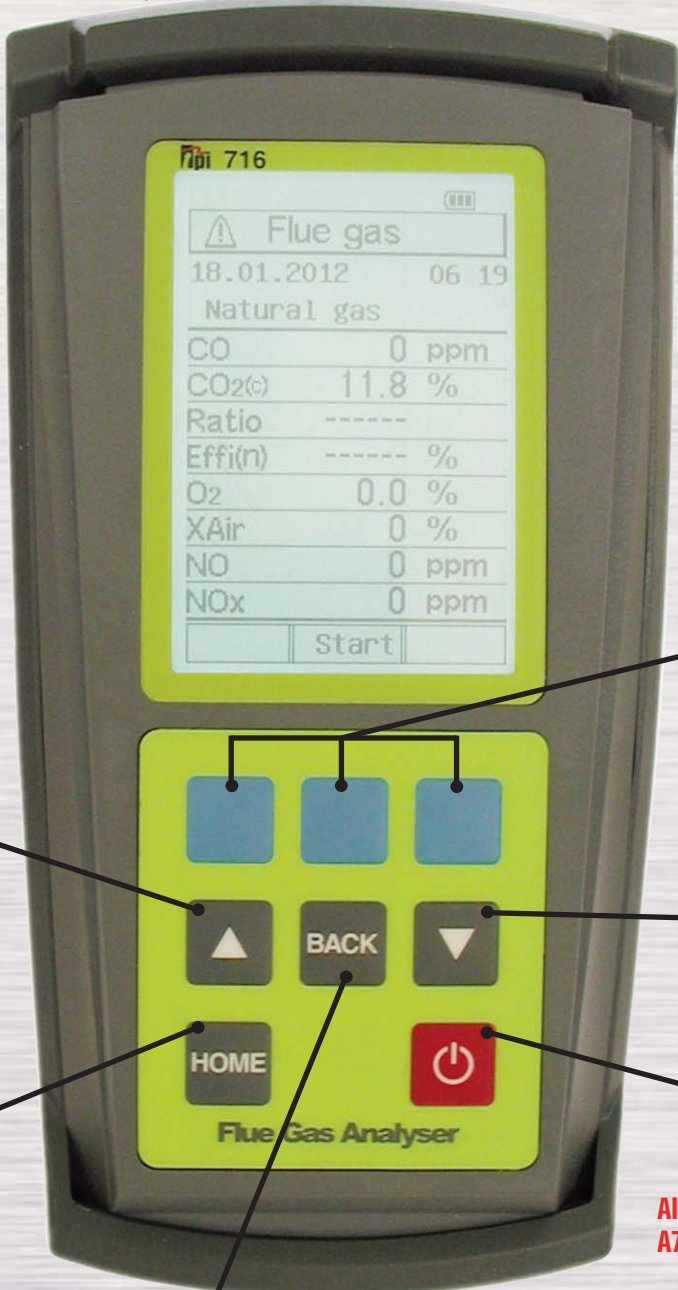
**Home:**  
Returns the analyzer to the main menu.

**On/Off Key:**  
Turns instrument On and Off

**Back Key:**  
Returns the analyzer to a previous menu level.

All combustion analyzers come with A787 soft padded carrying case

200mm x 90mm x 60mm



TPI 716	
Flue gas	
18.01.2012	06:19
Natural gas	
CO	0 ppm
CO <sub>2</sub> (c)	11.8 %
Ratio	-----
Effi(n)	----- %
O <sub>2</sub>	0.0 %
XAir	0 %
NO	0 ppm
NOx	0 ppm
Start	