

Standards House
 12 Doman Road
 Camberley
 Surrey
 GU15 3DF
 Tel: 01276 682841 Fax: 01276 691302
 e-mail: instruments@signal-group.com
 www.signal-group.com



WA154 Mk4 COMBUSTION ANALYSIS SYSTEM

The **WA154 Mk4 Combustion Analysis System** is designed to continuously sample and measure the levels of Carbon Monoxide (CO) and Carbon Dioxide (CO₂) in combustion exhaust. The results of the measurements and the ratio of CO to CO₂ are shown on calibrated displays.

The system is self-contained and is housed in a freestanding, wheeled cabinet. It includes two Signal Model 7000 Infrared Gas Analysers, a CO:CO₂ ration panel, a water catchpot and optionally a calibration gas cylinder with a pressure regulator.

Gas Analysis

The Model 7000 Series Analysers combine proven infrared measurement technology with powerful microprocessor based electronics. Operation by the user is made easy by a large graphic display and simple keypad control. For recording purposes, each analyser is provided with an analogue output and an RS232 output for PC or printer. Full details of the 7000 Series Analysers are given in separate data sheets.

Ration Function

A ratio panel, fitted as standard, continuously displays the ration of CO to CO₂. An output on the rear of the unit provides a voltage signal corresponding to this ratio.

Sample Handling

The gas sample is drawn through the system by a pump in each analyser through a water catchpot. The sample is filtered to prevent ingress of particulate matter. The level of the water condensate in the catchpot is continuously monitored and when it reaches a pre-set level, a pump is automatically switched on to drain the catchpot.

Calibration

The system calibrates the zero of each analyser using air within the cabinet, which is scrubbed of CO and CO₂ by soda lime and a catalytic converter respectively. A cylinder of calibration gas can be included within the system to provide a reference of known CO and CO₂ content.

Gases Measured	Ranges	Analyser Outputs	Ratio Display
Carbon Monoxide	CO: 0-500ppm, 0-2500ppm	Analogue: 0-10V	0 to 0.200
Carbon Dioxide	CO ₂ : 0-3%, 0-15%	4-20mA	
		Serial: RS232C	
Ratio Output	Power Requirements	Dimensions (Overall):	Weight (typical)
0 to 2V	110V/220V/240V	(H x W x D)	91Kg
	50Hz/60Hz	1270 x 550 x 600mm	134Kg (packed for
		1330 x 660 x 730mm	export)
		(Packed for export)	