

# AS80

## Zero air generator



The Signal Group's zero air generator uses a catalyst air purifier designed to provide an inexpensive source of clean, zero-grade air for flame ionisation detectors (FID).

### Flexible

- Replaces expensive air cylinders
- Uses replaceable, long-life catalyst
- Runs up to 5 flame ionisation detectors

### Easy to Use

- Connects direct to airline
- Incorporates a molecular sieve to prevent water vapour

### Accurate

- Uses high temperature furnace
- Removes all hydrocarbons, including methane



**Ancillary products**  
working alongside our  
gas analysers



# AS80 Zero air generator

## SPECIFICATIONS

The Signal Group AS80 zero air generator uses a catalytic air purifier to provide an inexpensive source of clean, zero-grade air for flame ionisation detectors. The unit removes all hydrocarbons, including methane, down to 0.1% of original level. Up to 5 flame ionisation detectors can be run from one AS80, and the instrument is suitable for continuous use.

### OPERATION

The AS80 contains a high temperature furnace which accepts alumina pellets coated in platinum. This oxidises all combustible compounds to CO<sub>2</sub> and H<sub>2</sub>O. No other type of adsorption or absorption method effectively deals with the problem of methane, which is found in ambient air.

The unit can completely remove methane at rates of up to five litres/min and continue to deliver at rates of up to 20 litres/min, although with a lessening degree of efficiency in removing methane as the flow increases. The unit still remains effective at higher rates for the removal of propane and higher fractions of hydrocarbon.

A major advantage of the AS80 is that its continuous clean air supply overcomes the need for costly zero-grade air cylinders. It also reduces noise in the readings of the analyser by eliminating fluctuations in burner air hydrocarbon content and improves response by providing an improved signal to noise ratio, with a quieter and more stable baseline.

The unit is designed for connection to 100psi compressor main lines. It incorporates a molecular sieve to prevent water vapour, which can cause condensation problems in the flame ionisation detector.

The AS80 is intended for a long working life, no consumables are required, and the expected life of the platinum is not dependent upon the degree of usage of the instrument. If the platinum becomes contaminated through silicones or lead compounds in the ambient air, Signal provide a standard recharge pack.

### RANGE

Up to 500ppm methane equivalent

### WEIGHT

15kg

### EFFICIENCY

Hydrocarbons reduced to below 0.1% of original level

### COMPRESSION FITTINGS

1/4" to 1/4" compression fitting

### METHOD USED

Catalytic oxidation, with molecular sieve

### RATINGS

100psig, 5l/min STP

### POWER

240V 50Hz 600W

### DIMENSIONS

19" rack mounting 3U high  
19" x 133.5mm x 570mm



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9001 : 2015  
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Cert No. 317012019