

SafeGuard Air Monitoring Instrument



The SafeGuard is the latest addition to the Factair test instrument range. This configurable instrument is available for monitoring either atmospheric or compressed-air supplies (up to 10 barg). Up to 6 different sensors can be fitted to suit a client's individual requirements. As standard the compressed-air version is fitted with a dewpoint meter rated down to -20°C PDP.

The unit has a volt free contact to allow it to be used for a range of scenarios such as sounding an external alarm or shutting down equipment. Alarm settings and the datalog file can be configured by the user over a wireless interface. Designed for challenging ambient light conditions the large 3.5" LCD display shows live sensor readings. If any of these exceed the configurable alarms levels they automatically change colour to indicate which of them are now in alarm. At the same time a 360° edge light will show users who cannot directly see the screen that the unit is in alarm.



The instrument can be powered directly from a 110/230V mains supply via an adaptor (or 12/24V AC/DC) and also incorporates rechargeable batteries as a back-up providing up to 8 hours of run time.

Depending on the number of sensors fitted the user can display the sensor readings in a variety of formats.



The SafeGuard can be configured using a local WiFi connection which is available from a smart phone/tablet device; this allows alarm readings and datalogging interval to be set. The datalog can also be downloaded as a CSV file and includes the minimum, maximum and average sensor reading during the user selected datalogging interval.

For multiple units there is also an option for mesh connectivity, so that if any SafeGuard goes into alarm it automatically triggers every other instrument in the group. Future options include fully featured cloud based data logging over WiFi or a GSM connection and a remote alarm beacon.



Screen shots of instrument configuration screens:

Model	Pressure		Weight	Connections
Compressed-air	2-10 barg	160mm long x 100mm high x 90mm deep	0.6Kg	Rectus 20KA
		Dewpoint meter +10 to -20°C PDP		
Atmospheric	50 metre draw	160mm long x 100mm high x 85mm deep	0.5Kg	Luer Lock

Up to 6 different sensors can be fitted – the most popular options include

Sensors	Range	Sensor type	Sensors	Range	Sensor type
O ₂	0-25%	Electrochemical	LEL	0-100%	Non-Dispersive Infrared
CO	0-20 PPM	Electrochemical	H ₂ S	0-10 PPM	Electrochemical
CO ₂	0-5000 PPM	Non-Dispersive Infrared	NO	0-20 PPM	Electrochemical
VOCs	0-40 PPM	Photoionisation Detector (PID)	NO ₂	0-20 PPM	Electrochemical
SO ₂	0-50 PPM	Electrochemical	Temperature Sensor -10 to 40°C		

SafeGuard-A – fitted as standard with 0-100% relative humidity capacitive polymer sensor

SafeGuard-C – fitted as standard with -20 to +10°C capacitive polymer pressure dewpoint meter

If you require an alternative sensor please contact Factair