AirWatch MK1.2
Flexible Gas Detection

The AirWatch is your safe area solution for the monitoring of various gases. Based on the measurement values and alarms, equipment is switched on or off, data is logged and optionally employees are remotely informed of the gas concentrations present.

The AirWatch is a safe area monitor with pump, controller, alarm and switch. It can switch on a wide variety of equipment in the event of a gas alarm, from generators to breathing air units and power supplies. With the optional wireless function, you can also view monitor several AirWatches. The data is stored on the PC/laptop or on an SD card in the device itself, with real-time information giving a clear picture of the different locations. Many configurations are possible, so the AirWatch can be used very flexibly, either in standalone mode or as part of a complete system.

Key Features

- Functions in standalone mode or as part of a wireless mesh network
- Automatically switches devices on/off with 3 built-in relais
- Developed for demanding environments
- Can be used indoor and outdoor
- Flexible and programmable
- Built-in pump
- Backup battery included
- Settable alarms
- Beacon Sounder option
- Receiver + software option
- Repeaters available
- Wireless option up to 300 meters

Application Examples

- Excellent for temporary monitoring where fixed gas detection is needed.
- Monitoring of confined spaces and areas
- Cleaning activities
- Water purification
- Petrochemical industry
- Shipyards
- Shutdown monitoring
- Transportation, distribution, offloading
- (Container) fumigation
- Hospitals
- Construction and earthmoving

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GENERAL SPECIFICATIONS

Dimensions	280 x 165 x 137 mm
Weight	2.0 kg
Fixation	Standard back plate with 2 magnets
Sensors (see sensor specifications)	4 gases, 1 high power socket
Visible alarm	Green LED for SAFE indication Red LED for ALARM indication Optional 107 dB beacon sounder (item no: AIR-BEAC-010)
System communication	Stand-alone via cable type 1 or 2, RS 485 or Wireless via 2.4 GHz ISM band, complies with the IEEE 802.15.4 standard and 3/4G with the WatchGas remote online platform
Range wireless	300 meters (with line of sight) (2.4 GHz)
Communication	Max. 50 remote detectors in one system
Keys and display	2 Magnet reed contact switches LCD text screen with 2 lines and back-ground lighting
Sampling pump	Built-in pump
Energy supply	9 - 36V DC. Backup battery is basic included Battery run-on time max. 60 min.
Potential free con-tact	Three free programmable contacts rated Maximum 24V DC 2A
Operation temperature	-20°C to 45°C
Humidity	0 - 95% RH, non-condensing
Data logging	SD Card logging
IP-Rating	IP65

AirWatch connection cable type 1.

Amphenol female 7 pins molex

Earth	DC negative
1	DC positive 9/36vDC
2	Com
3	NC
4	NO

Cabel & Wiringnumbers

Y/G	DC negative
1	DC positive 9/36vDC
2	Com
3	NO
4	NC

Amphenol male 6 pins

A	DC positive 9/36vDC
B	DC negative
C	
D	NO
E	Com
F	NC

AirWatch connection cable type 2.

Amphenol female 7 pins molex

Earth	DC negative
1	DC positive 9/36vDC
2	Com
3	NC
4	NO

Batteryclamps

Red	DC Positive
Black	DC Negative

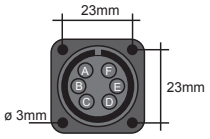
Cabel & Wiringnumbers

Y/G	DC negative
1	DC positive 9/36vDC
2	Com
3	NO
4	NC

Amphenol female 3 pins

A	Com
B	NO
C	NC

AirWatch chassisconnector



Connector female 6 pins

A	DC positive 9/36vDC
B	DC negative
C	
D	NO
E	Com
F	NC

Connector dummycaps. 3 female & 6 male pins

Amphenol male 6 pins

A	
B	
C	
D	
E	Bridged
F	Bridged

Amphenol female 3 pins

A	Bridged
B	
C	Bridged

Airwatch Pump Specifications

Operating flow	400 - 800 ml/min with adjustable upper and lower limit flow alarm
Free flow	1900 ml/min
Flow rate at 100/-100 mbar	920/850 ml/min
Max. pressure	400 mbar
Max. vacuum	-400 mbar
Max. Sampling hose	50m.

Also available with optional Beacon Sounder

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SENSOR SPECIFICATIONS

Gas	Range	Resolution	Response t_{90}
CO	0-2000 ppm	1 ppm	< 30s
CO LR	0-200 ppm	20 ppb	< 20s
CO HR	0-10000 ppm	5 ppm	< 50s
CO comp. H_2	0-2000 ppm	1 ppm	< 30s
H_2S	0-100 ppm	0.1 ppm	< 30s
H_2S HR	0-2000 ppm	1 ppm	< 25s
SO_2	0-50 ppm	0.1 ppm	< 35s
NH_3	0-100 ppm	0.1 ppm	< 80s
HCN	0-100 ppm	0.1 ppm	< 70s
PH_3	0-10 ppm / 0-2000 ppm	0.01 ppm	< 60s
CL_2	0-50 ppm	0.01 ppm	< 60s
NO_2	0-20 ppm	0.01 ppm	< 50s
NO	0-250 ppm	0.2 ppm	< 45s
LEL-Cat	0-100%	1%	<10s for CH_4
LEL-NDIR	0-100%	1%	<10/30s CH_4
CO2-NDIR-LR	0-10000 ppm	10 ppm	<30s
CO_2-NDIR	0-5%	0.01%	<30s
CO_2-NDIR HR	0-100%	0.1%	<30s
O_2	0-25%	0.01%	<15s
PH_3-HR *	0- 2000ppm	1ppm	Response unknown
SO_2-LR	0-50ppm	0.01ppm	<30s
THT	0-50mg^3	0.3mg^3	<60s
PID	0-20ppm	0.01ppm	<5s
PID	0-1000ppm	0.2 ppm	<3s
PID	0-10000ppm	2ppm	<3s
H_2*	0-2000ppm	1 ppm	<35s
ETO*	0-100ppm	1ppm	<300s

Check AirWatch sensor specification for detailed sensor information.
**For PH_3 HR , H_2, ETO , please contact for availability.*

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