



AIRWATCH MK_{1.2} FLEXIBLE GAS DETECTION

APPLICATIONS

- Water purification
- Petrochemical industry
- Schipyards
- Fumigation
- Confined spaces
- Controlling machines
- High range CO₂
- Construction
- Hospitals

FEATURES AND BENEFITS



DISPLAY

The AirWatch has a backlight display so that it is visible in dark areas or when built in to a machine. The protective cover must be kept closed as much as possible to keep out moisture and dirt. The activation buttons are located outside of the protective cover, so they too, are moisture and dirtproof.



BEACON SOUNDER

The AirWatch can optionally be equipped with an Beacon sounder. This can be desirable in an area with a lot of ambient noise or better visibility. The built-in sounder gives a signal of at least 107 dB, and the bar has red and green LEDs that are visible from 360°. In normal measurement mode, the green LED will be on. In case of an alarm, the red LED will flash and a signal will sound. The standard AirWatch LED and display signalling will remain normally visible in this configuration. AirWatch Receiver



DATA LOGGING

Datalog is basic. The datalog interval can be setup with the configuration software. SD cards for the data logger and configuration files can be inserted in the appropriate slot, making it easy to configure your device for a different application. The SD card can easily be removed by opening the protective cover and carefully pressing the card with one finger until it pops out. The SD can be read using your computer. To read the card, select it in Windows Explorer and open the 'logs' folder to view log files arranged by date and in text format. This data can be imported into Microsoft Excel and other tools. A 4GB SD card will be full in approximately 166 days if the data logging interval is one second.



FLOW REGULATOR

For bump test and calibration a demand flow regulator is recommend, for the toxic gases we recommend to use a stain- less steel flow regulator 1.0lpm with use of an t piece see figure below the demand regulator on a gas bottle ensures the correct quantity of gas necessary to carry out a calibration or bump. Because the pump creates a vacuum, the regulator will release the gas, enabling it to flow over the sensors. The supply is demand-based to prevent the loss of gas.



SOFTWARE

The specially developed monitoring software for the Wireless Airwatch can be used for many different purposes, for example in process control rooms, CCTV monitoring, and issuing work permits. The real-time data from the AirWatches enters via an additional PC or laptop. If an alarm or report is received, the system gives a visual and an audible alarm and full details are given on the screen so you can quickly take action. Early warning is key here!

The AirWatch is a non-ATEX area monitor with pump, controller, alarm and switch in one device. It can operate switches 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 remotely monitor several AirWatches. The data is stored on the PC/laptop or on an optional 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

General Specifications

Dimensions	280 x 165 x 137 mm
Weight	2.0 kg
Fixation	Standard back plate with 2 magnets
Sensors**	4 gases
Visible alarm	Green LED for SAFE indication Red LED for ALARM indication Optional 107 dB beacon sounder (item no: AIR-BE-AC-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
Range wireless	300 meters (with line of sight)
Detectors	Supports up to 50 remote detectors
Keys and display	2 Magnet reed contact switches LCD text screen with 2 lines and background lighting
Sampling pump	Built-in pump
Energy supply	9 - 36V DC. Backup battery optional. Battery run-on time max. 60 min.
Potential free contact	Three free programmable contacts rated Maximum 24V DC 2A
Operation temperature	-20°C tot 45°C
Humidity	0 - 95% RH, non-condensing
Data logging	Optional SD Card logging


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.

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


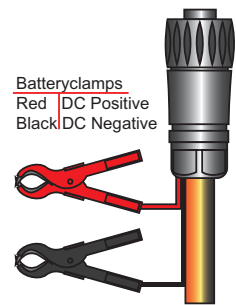
A	DC positive 9/36VDC
B	DC negative
C	
D	NO
E	Com
F	NC



AirWatch connection cable type 2.

Amphenol female 7 pins molex

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

Battery clamps
Red DC Positive
Black DC Negative


Cabel & Wiringnumbers

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

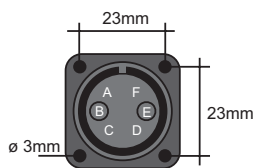


Amphenol female 3 pins

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

Sensor specifications

Gas	Range	Resolution	Response t ₉₀
CO	0-2000 ppm	1 ppm	< 30s
CO LR	0-200 ppm	20 ppm	< 20s
CO HR	0-10000 ppm	10 ppm	< 50s
CO comp. H ₂	0-2000 ppm	1 ppm	< 30s
H ₂ S	0-100 ppm	0.1 ppm	< 30s
H ₂ S HR	0-2000 ppm	1 ppm	< 25s
SO ₂	0-50 ppm	0.1 ppm	< 35s
NH ₃	0-100 ppm	1 ppm	< 80s
HCN	0-100 ppm	0.1 ppm	< 70s
PH ₃	0-10 ppm / 0-2000 ppm*	0.1 ppm / 1 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%	
LEL-NDIR	0-100%	1%	
CO ₂ -NDIR	0-10000 ppm	10 ppm	
CO ₂ -NDIR	0-5%	0.01%	
CO ₂ -NDIR HR	0-100%	0.1%	
O ₂	0-25%	0.01%	

Check AirWatch sensor specification for detailed sensor information.

FOR MORE (ORDER) INFORMATION

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