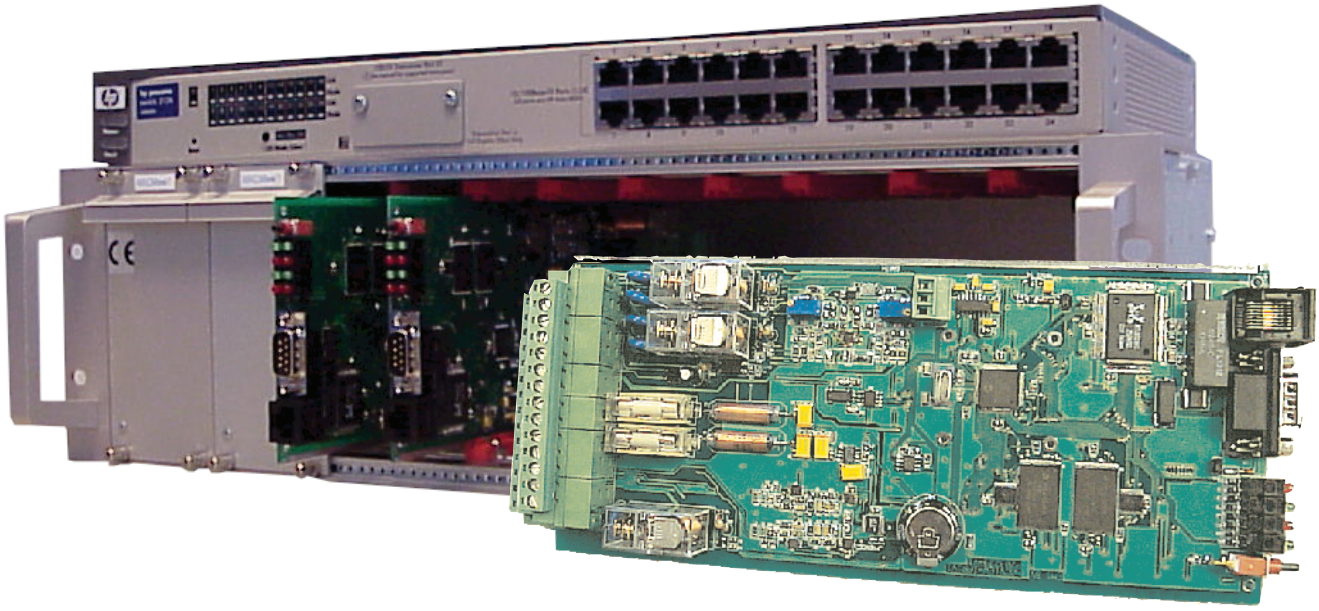


MAC*View*®

IPR

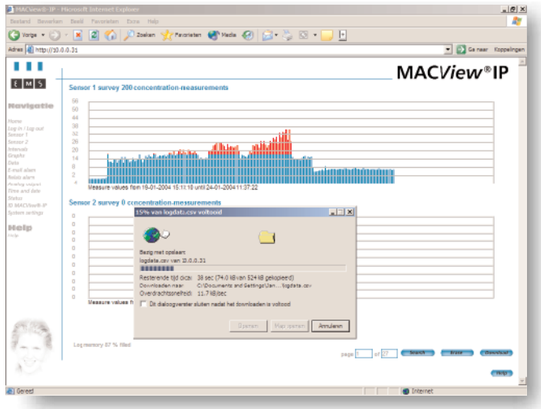
The concept for monitoring via an Internet browser

Measurement and monitoring with a browser

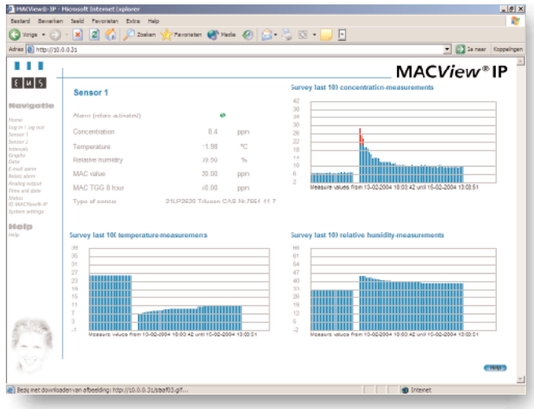
People demand for availability of data. Much devices collect data, day in day out. Via the control screen or a laptop of the operator data can be visualised. Now it is possible with the MAC*View*®-IPR to get all the necessary information from gas, vapour and fine-dust sensors by viewing them in your browser or to download them.

The MAC*View*®-IPR is a gas, vapour and fine-dust monitoring system that contains all the visualisation software in the device. The monitoring system has its own internal web-server that can be connected to the intranet or via a firewall to Internet. All imaginable visualisations and parameters are controlled via a standard web browser.

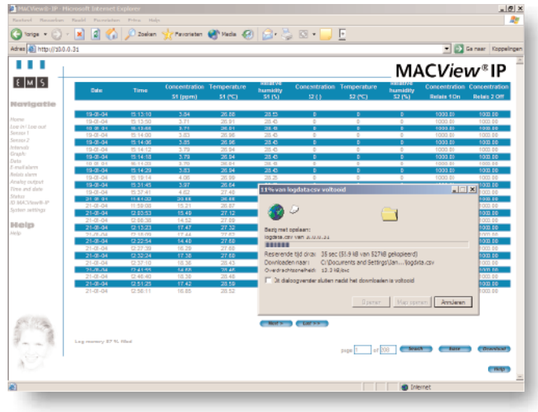
MAC*View*®-IPR screenshots:



Graphics and downloads

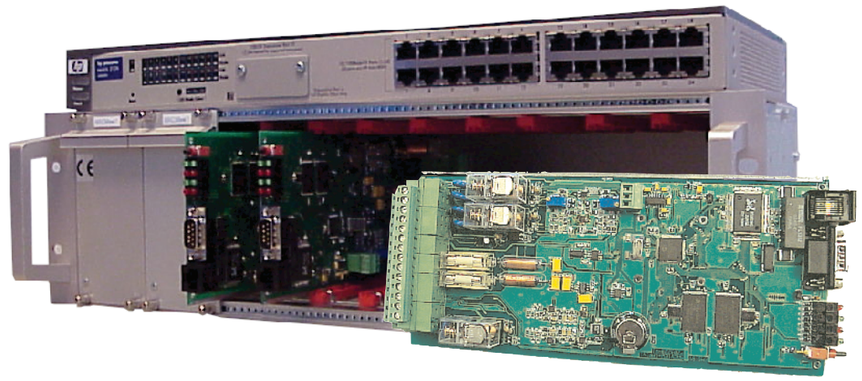


Actual sensor status and the last measred values



Tables and downloads

MAC*View*®-IPR Intranet / Internet Communication



Anytime, Anywhere, Any MAC*View*®-IPR

With this system and an Internet connection it is possible to view the process from 1 location, several buildings, offices, factories or garages spread through the whole world. The systems can give their status by Internet or intranet. The advantages are big. A quality assurance department can see in one eye the effort of the heating and ventilation system, or the quality control department can see the amount of dust particles in the air from a packaging factory for food.

Database management with TCP/IP

In the MAC*View*®-IPR there is an internal database where data is logged. The software comes from the browser by typing the right address or by clicking the right MAC*View*®-IPR in the management software. To get overview of many MAC*View*®-IPR gas monitoring systems a special software tool is available to manage all the MAC*View*®-IPR systems that are in the network. You can control it by distance, manage, monitor and look at incoming alarms. The system is fully based on Ethernet connections and uses the worldwide spread TCP/IP communication protocol to send its data through the Internet. Integration in existing Ethernet and intra-networks is easy to perform. The unique concept is that there is feedback from messages and alarms that came in by E-mail. Immediately after receiving the message you can look on the location where the message came from and zoom in on the database and actual values to handle the message or alarm.

Modular, and expandable

The MAC*View*®-IPR is build modular. In theory there could be as much MAC*View*®-IPR systems run on the network as there are available Internet addresses. The system is build around a 19" rack. Every 19" case contains a maximum of 8 IPR-cards with 2 sensors on each card. This means that with one 19" case up to 16 sensors at the same time are monitored. When the 19" case is full, a new 19" case can be added in the rack.

Standards

Every MAC*View*®-IPR has its own IP-address. Due to this the system works with the worldwide spread standards of intranet and Internet communication. In the system are standards used as Ethernet IEEE 802.3, TCP/IP, HTML and SMTP. From Electrical point of view the MAC*View*®-IPR is build according NEN-EN-IEC 61000-6-1 up to NEN-EN-IEC 61000-6-4 and approved according CE standards. Beside to the specific intranet properties, the MAC*View*®-IPR contains all traditional properties that normally available on a gas, vapour and fine-dust measurement system: Switch functionality with 2 potential free relays, analog outputs for the external recording of measurements, controlling frequency regulators for ventilations systems or climate control are all standard available. Further there is an integrated E-mail functionality. When an alarm value is exceeded the MAC*View*®-IPR automatic sends an E-mail message to 2 E-mail addresses of your choice.

Security and protection

The MAC*View*®-IPR has its own security. This works on 2 levels. The lowest level is the normal user. This user can only view data and modify plain parameters. The second level is meant for the administrator who fully manages the system. Usernames and passwords are then adjustable.

The advantages in an overview

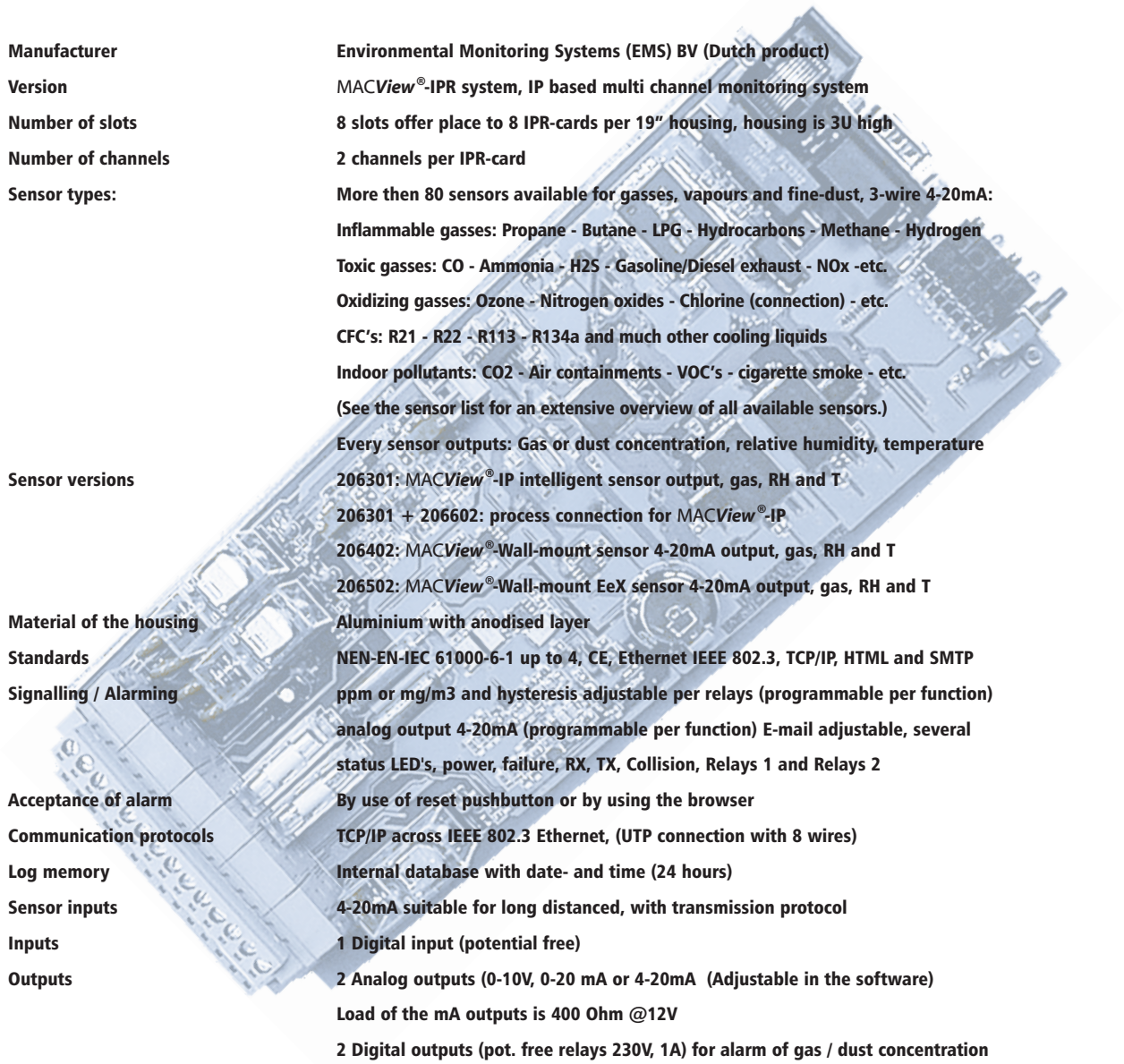
- Easy installation (No software needed)
- Modular build and easy expandable
- Up to 80 different gas-, vapour- and fine-dust sensors available
- Easy to connect to existing intranets and Internet
- Alarm message also via E-mail
- All imaginable actions adjustable, (2x analog out en 2x dig. out)
- Failure relays activates at internal fault of sensors or system
- At failure of 1 IPR-card or sensor other systems keep working
- For coupling to central management system, software available
- The MAC*View*®-IPR has an internal database and web server

Demonstration

Take notice of one of the MAC*View*®-IPR systems that are online available for demonstration purposes on Internet. Browse to the link on http://www.macview.info and look under products, MAC*View*®-IPR and you can access the MAC*View*®-IPR without logging on to the system.

TECHNICAL SPECIFICATIONS

MAC*View*®-IPR



Manufacturer	**Environmental Monitoring Systems (EMS) BV (Dutch product)**
Version	MAC*View*®-IPR system, IP based multi channel monitoring system
Number of slots	**8 slots offer place to 8 IPR-cards per 19" housing, housing is 3U high**
Number of channels	**2 channels per IPR-card**
Sensor types:	**More then 80 sensors available for gasses, vapours and fine-dust, 3-wire 4-20mA:**
	Inflammable gasses: Propane - Butane - LPG - Hydrocarbons - Methane - Hydrogen
	Toxic gasses: CO - Ammonia - H2S - Gasoline/Diesel exhaust - NOx -etc.
	Oxidizing gasses: Ozone - Nitrogen oxides - Chlorine (connection) - etc.
	CFC's: R21 - R22 - R113 - R134a and much other cooling liquids
	Indoor pollutants: CO2 - Air containments - VOC's - cigarette smoke - etc.
	(See the sensor list for an extensive overview of all available sensors.)
	Every sensor outputs: Gas or dust concentration, relative humidity, temperature
Sensor versions	**206301:** MAC*View*®**-IP intelligent sensor output, gas, RH and T**
	206301 + 206602: process connection for MAC*View*®**-IP**
	206402: MAC*View*®**-Wall-mount sensor 4-20mA output, gas, RH and T**
	206502: MAC*View*®**-Wall-mount EeX sensor 4-20mA output, gas, RH and T**
Material of the housing	**Aluminium with anodised layer**
Standards	**NEN-EN-IEC 61000-6-1 up to 4, CE, Ethernet IEEE 802.3, TCP/IP, HTML and SMTP**
Signalling / Alarming	**ppm or mg/m3 and hysteresis adjustable per relays (programmable per function)**
	analog output 4-20mA (programmable per function) E-mail adjustable, several
	status LED's, power, failure, RX, TX, Collision, Relays 1 and Relays 2
Acceptance of alarm	**By use of reset pushbutton or by using the browser**
Communication protocols	**TCP/IP across IEEE 802.3 Ethernet, (UTP connection with 8 wires)**
Log memory	**Internal database with date- and time (24 hours)**
Sensor inputs	**4-20mA suitable for long distanced, with transmission protocol**
Inputs	**1 Digital input (potential free)**
Outputs	**2 Analog outputs (0-10V, 0-20 mA or 4-20mA (Adjustable in the software)**
	Load of the mA outputs is 400 Ohm @12V
	2 Digital outputs (pot. free relays 230V, 1A) for alarm of gas / dust concentration
	1 Digital output (pot. free relay 230V, 1A) for alarm at internal failure
Service connection	**RS 232 interface**
Supply	**Mains 230 VAC, available output: 5VDC - 50W, 12VDC - 150W for external sensors**
Operation temperature sensors	**-30 + 80 degrees Celsius, relative humidity 5 tot 95%, no condensation**
Operation temperature MAC*View*®**-IPR**	**-10 + 50 degrees Celsius, relative humidity 5 tot 95%, no condensation**
Software	**Integrated in an autonomous web server. For more IP or IPR systems is**
	an optional management tool available.
User interface	**HTML pages**
Dimensions MAC*View*®**-IPR**	**Rack 3U, 19" frame W 482 x H 132 x d 266 mm**
Mounting	**In a cabinet frame-rack suitable for 19"racks**

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