

**MEASURE it ...**



# PRODUCTS

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**2019**



The Vision of Industrie Automation Graz - Ing. W. Häusler GmbH is to sell innovative measurement and data logging solutions for the measurement values humidity, temperature, flow, pressure, gases in the area of process optimization, quality management and safety.

The main focus is to satisfy the customers need which we will achieve through our consulting, engineering, training, repair and calibration service.

With kind regards from Graz-Raaba,

A handwritten signature in black ink, appearing to read 'W. Häusler', with a stylized, flowing script.

**INDUSTRIE AUTOMATION GRAZ**

Ing. W. Häusler GmbH



## **PROCESS..... page 4-7**

Humidity-, Dewpoint-, Pressure-, Flow Measurement

Temperature Measurement, Gases, Emission, Turbidity and Solid Content

Data Acquisition, Multichannel Data Logger, Displays, Converter

## **HVAC..... page 8-10**

Humidity-, Dewpoint-, Pressure-, Flow Measurement

Gases, Ventilation Technology, Air Quality, Particle

Compact Logging Systems, Multichannel Data Logger

## **ENVIRONMENT.....page11-13**

Meteorology, Humidity-, Dewpoint-, Pressure Measurement

Flow Measurement, Gases, Immission/Dust

Data Acquisition

## **SERVICE.....page14**

Pressure, Temperature,

Humidity, Flow



## Thermal flow measurement

robust and versatile application...

- Compressed air and gases
- Measurement range from 0,2 to 200 m/s
- High accuracy



## HUMIDITY



Accurate and long-term stable measurements...

- Robust housing with the latest sensor technology
- Fixed and remote probes
- Measurement range from 0...100 % rH
- Output scaling
- HUMICAP® - Sensors with the possibility to calibrate

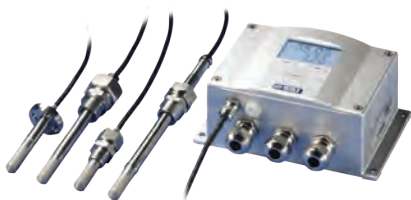
## MOISTURE IN OIL



Fast water activity measurements in oils...

- Ideal for real-time humidity monitoring
- Control of oil separators and oil driers
- Saves on oil and protect the environment
- Different types of probes for use in lubricants, Hydraulic systems and transformers (ppm calculation)

## DEWPOINT



For demanding industrial applications...

- Precise dewpoint measurement to - 80°C Td
- Lower maintenance costs with auto-calibration
- Fast response-time
- Pressure up to 250 bar

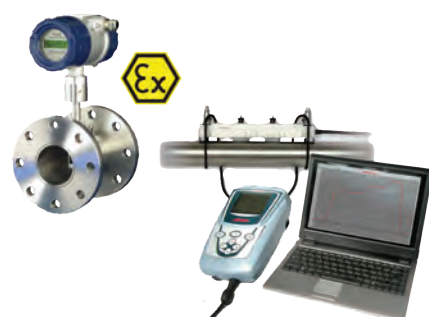
## PRESSURE



### Flexible mounting options...

- Measurement ranges from +/- 35kPa to 100MPa
- Available with manual or pneumatic drive
- Easy to separate the probe from the process for cleaning or maintenance with the PASVE mounting valve
- Various materials for the membranes

## FLOW



### Portable and stationary solutions...

- Measurement from 10 mm to 10 m in diameter for an easy installation
- Thermal probes with a dynamic measurement range from 0,07 to 200m/s for temperatures up to 200°C
- Robust Vortex-probes with a measurement range from 0,5 to 40m/s for temperatures up to 240°C
- Vane wheel probes with a measurement range from 0,01 to 120m/s for temperatures up to 550°C

## TEMPERATURE



### Accurate temperature measurements...

- Industrial Thermocouples with remote transmitter
- High pressure thermocouples
- Tube skin temperature sensors
- Temperatures in the range of -254.3°C to +850°C
- Extreme accuracy (less than 0.03°C at 0°C)
- Excellent long-term stability

## GASES



### Optimized CO2-modules...

- Includes the Vaisala CARBOCAP® silicon-based NDIR sensor
- Protection class IP65 is protected against dust and splashing water
- Several ranges, easy installation
- Changeable probes



## EMISSION



Optimal gas analyses for process controls...

- In the IR and UV wavelengths
- DOAS (Differential-Optical-Absorption-Technology)
- Metrics: NH<sub>3</sub>, SO<sub>2</sub>, CO, H<sub>2</sub>O, O<sub>2</sub>,...
- Certificates: TÜV, EPA, GOST
- Easy for maintenance and to calibrate

## TURBIDITY/SOLID CONTENT



Save costs and time...

- Suitable for measurements in various liquids
- Digital communication via Hart-protocol
- Process temperatures from -30 to +200°C
- Pressure PN20
- 4...20mA output signal, 12 to 35VDC supply

## DATA ACQUISITION



Specifically for the use in the industry...

- DT8x high-speed data logger
- Stable housing with display
- Integrated GSM-modem
- New App for the current datas - directly to Smartphones/ iPad/iPod/iPhone

## MULTICHANNEL DATA LOGGER



Mobile, multi-purpose data logger...

- Compact and easy to configure
- Measure the current, voltage, resistance and temperature
- Several probes can be connected
- Ethernet - communication

## DISPLAYS



### Subsistence meters...

- Process variables displays for panel mounting
- Single- or multichannel devices
- Various sizes

## CONVERTER



### Transmitter or signal converter...

- For conversion of standard signals
- 0/4 to 20mA, 0...1...10V
- Pt100/1000, thermocouples
- Various interfaces

## FLOWTHERM NT - ONE METER FOR EVERY APPLICATION

The userfriendly handheld meter Flowtherm NT offer a wide variety of applications due to the diversity of the sensors suitable for connections FA, VA, TA, Pt100,...

The integrated data logger records approximately 5000 values with date and time and the datas are easy to download with USB interface to the PC. Another benefit is the large, highcontrast display with a optional backlight. It is easy to use and has a tactile key feedback. The display shows various measuring modes:

- m/s, m<sup>3</sup>/h, l/min, l/s, kg/h, min, fpm, cfm,...
- °C, °F
- hPa, % rH, mA

The Flowtherm NT is used in flow measurement applications in all branches of industry, municipal facilities and public authorities, research and development. It is possible to measure the gas mass flow and also the flow in air, exhaust air, process gases, particulate and condensate laden emissions, exhaust emissions and aggressive gases with high working temperatures. Furthermore, it is used in systems methods to determine flow rate or average flow velocity of single measurements, or measuring tasks on filters and ventilators.







## HUMIDITY

Accurate and reliable measurements...



- Fixed and remote probes
- Measurement range from 0...100 % rH
- Output scaling
- HUMICAP® - Sensors with the possibility to calibrate

## PRESSURE

Reliable room pressure measurement...



- Inputs for humidity and temperature sensors
- Stable measurements due to auto-zero
- Scaleable measurement ranges from +/- 10 Pa to +/- 100 kPa

## FLOW

Easy and cost-effective installation...



- Ultrasonic flow technology
- Easy installation by clamp on
- Data logger function
- Heat flow measurement



## CARBON DIOXIDE CO<sub>2</sub>



Several ranges, easy installation...

- Includes the Vaisala CARBOCAP® silicon-based NDIR sensor
- Protection class IP65 is protected against dust and splashing water
- Changeable probes

## VENTILATION TECHNOLOGY



Multifunctional and stable...

- Large display up to 5 measurement parameters simultaneously
- „Plug and Play“-probes optionally available, included CO<sub>2</sub>- and vane wheel probes
- Manual or continuous data recording with indication of time and date

## AIR QUALITY



Cost effective and varied usable..

- Data storage function and real-time measurement
- Aerosols in dust, smoke, fumes and mists measurable
- Measurements possible in industrial plants and also in clean environments

## PARTICLE



Reliable and highly-absorbent particle counter...

- Portable particle counters measuring range of 0...25µm, 28,3/50/100 l per minute
- ISO14644-1-classification and fully certified according to GMP guidelines
- Opportunity for on-site filter analysis
- Visualization Trak Pro Lite or FMS-CFR 21 Part 11 conform

## COMPACT LOGGING SYSTEMS

Easy installation and limitless expandable...



- Monitoring, recording and alarming for the regulated sector
- Precise humidity and temperature measurement
- Software included

## MULTICHANNEL DATA LOGGER

Mobile, multi-purpose data logger...



- Compact and easy to configure
- Measure the current, voltage, resistance and temperature
- Several probes can be connected
- Ethernet - communication
- W-Lan

## MOST ACCURATE AND BATTERY OPERATED DATA LOGGER

Compliance with strict regulatory guidelines and quality requirements demands accurate measurement, secure data, and comprehensive reporting. Unlike any competitive product, the vLog™ system specifies temperature and relative humidity accuracy for one year, eliminating the cost of frequent calibration. It's an easy-to-use, cost-saving, high accuracy solution for mapping critical and FDA-regulated environments — from stability chambers, to freezers, to warehouses. The vLog system is the most accurate and effective solution for understanding your environments and complying with regulations.

With easy set-up and placement of self contained data loggers, you can be mapping a chamber in minutes. Each logger contains highly stable sensors, large internal memory, and a 10-year battery, eliminating the threat of power failure or lost data — while saving time and money with fast deployment. vLog maintains all data and events in secure files, providing tamperproof security with presentationready reports. You always have documentation on hand to evaluate each test quickly and meet CFR 21 Part 11.



## Aerosol monitoring in real-time...

- Simultaneous measurement of mass concentration of  $PM_{10}$ ,  $PM_{2.5}$ ,  $PM_{10}$
- Integrated gravimetric measurement for reference calibration
- Easy programming, easy operation



## METEOROLOGY

### Universal weather station...



- Measurement of the 6 most important weather parameters
- Low power consumption - works also with solar collectors
- Data logger: Up to 15 ( $\pm 30V$ ) sensor inputs
- Modbus for SCADA connection, SDI-12 ports

## HUMIDITY

### Accurate and long-term stable...



- Measurement range from 0...100 % rH
- Heated probe, Data logger
- Compatible with the handheld meter HM70 and HMI41 for calibration
- Calculated variables: dewpoint temp., enthalpy, wet temp. mixing ratio, absolute humidity, wet bulb temp. and water vapor pressure

## DEWPOINT

### Fast dewpoint temperature measurement...



- HUMICAP® 180R sensor accurate, reliable, longterm stable
- High Humidity application
- Heated probe version

## PRESSURE



Precise and easy field trials...

- Maximum of barometric pressure 5000 hPa abs.
- Data recording up to 30 days
- Acoustic alarm function

## FLOW



For every application a large selection...

- 3 different types of sensors in 4 different probe lengths
- Monitoring of drying processes and air flows at streets and subway tunnels
- Standard equipment for the use in wind tunnels or calibration facilities

## GASES



Compact and easy solutions...

- Includes the Vaisala CARBOCAP® silicon-based NDIR sensor
- Protection class IP65 is protected against dust and splashing water
- Several ranges, easy installation
- Changeable probes

## IMMISSION/DUST



Monitoring systems and analyzers...

- Measurement range 0...400 mg/m<sup>3</sup>
- Particle sizes 0,1...15 µm
- Operating temperature 0 to 50°C
- New graphical user interface with color touch screen
- Battery-operated laser photometer with light-scattering measurement and data logger

## AEROSOLS



### Battery-operated laser photometer with datalogger...

- Simultaneous measurements of the mass concentration of size fractions of PM1, PM2.5, respirable, PM10 and total mass concentration
- Easy programming and operation
- New, graphical touchscreen
- Implementation of integrated gravimetric analysis for reference calibration

## DATA ACQUISITION



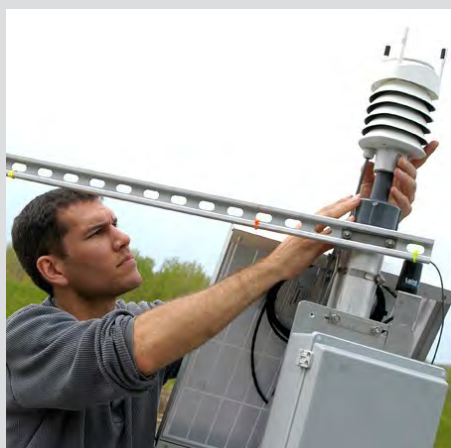
### Easy transferring data...

- DT8x high-speed datalogger
- Stable housing with display
- Integrated GSM-modem
- New App for the current datas - directly to Smartphones/iPad/iPod/iPhone

## MULTI-WEATHER-SENSOR WXT520 WITH THE DATA LOGGER DT80 EVALUATES UP TO 6 PARAMETERS

The Vaisala Weather Transmitter WXT520 measuring the six most essential weather parameters, like wind speed and direction, liquid precipitation, barometric pressure, temperature, and relative humidity in one fully integrated instrument. It is a accurate and stable meter which is easy to install outside and also to configurate on the PC. The sensor has no moving parts, so he is protected against birds, branches and insects. Applications include weather stations, dense networks, buildings, golf courses, marinas, harbors, and hotels.

The dataTaker DT80 is a smart data logger that provides an extensive array of features that allow it to be used across a wide variety of applications, also for example with the WXT520.



The DT80 is a robust, stand alone, low power data logger featuring USB memory stick support, 18 bit resolution, extensive communications capabilities and built-in display. The dataTaker DT80's Dual Channel concept allows up to 10 isolated or 15 common referenced analog inputs to be used in many combinations.

With support for multiple SDI-12 sensor networks, Modbus for SCADA systems, FTP and Web interface, 12V regulated output to power sensors, the DT80 is ready to be rolled out into environmental, industrial and many other types of monitoring projects.





**Use our fast calibration service!**

- Adjustment in accordance with specifications
- Calibration certificates before and after adjustments
- Replacement of worn parts

## LOW PRESSURE



Reliable low pressure calibrator...

- Portable, suitable for on-site calibration
- Automatic zero point calibration provides a high stability
- Positive or negative differential pressure up to 100kPa
- Pump included

## SALT BATH CALIBRATOR



Laboratory and on-site calibrator...

- Easy and reliable calibration
- Saturated salt solutions
- Suitable for laboratory checks and on-site checks

## TEMPERATURE



Portable temperature calibrator...

- Liquid and dry-block calibrators
- Temperature from -30°C to 1100°C
- Automatic calibration software AQ2sp





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