













WWW.IAG.CO.AT



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.

For further informations or a online demonstration contact us under:

sales@iag.co.at T: +43 316 405 105

With kind regards from Graz-Raaba,



Ing. Wolfgang Häusler Managing Director

#### INDUSTRIE AUTOMATION GRAZ

Ing. W. Häusler GmbH Autaler Straße 55 - A-8074 Raaba-Grambach T: +43 316 405 105 - F: +43 316 405 105 22 office@iag.co.at - www.iag.co.at

## CONTENT

### PROCESS

Humidity	
Moisture in Oil	6
Dewpoint	7,8
Pressure	9
Flow Gases	
Flow Liquid	
FLow Coriolis	12
Carbon dioxid	
<u>gas analysis</u>	14
Turbidiy / Consistency	15
Data acquisition	16
Displays / Converter	

## HVAC

<u>Humidity</u>
<u>Pressure</u>
<u>Flow</u>
Monitoring
<u>Particle</u>

## **ENVIRONMENT**

Meteorology
Immission / Dust
Data acquisition

### HANDHELD METERS

Humidity / Moisture in Oil / Dewpoint	26
Flow / Gases	27
Ventilation Technology	28
Airquality	29

### SERVICE

Temperature	0
Humidity / Pressure	1
Repair and Calibrationservice	2

### Indigo 200 Series



### **Intelligent probes**



### HPP272



HMT330



#### Series 200 Indigo Transmitter...

- Plug-and-play probe connection for Vaisala Indigo compatible probes
- Wireless interface for configuration and temporary use
- Operating Temperature: -40 ... +60 °C, with display -20 ... +60 °C
- LCD-Farbdisplay (Analogmodell optional ohne Display)
- IP65 enclosure
- 24 V power supply input

## Humidity- and Temperature-Probes with digital Modbus RTU-communication...

- HMP3 for general-purpose probes with interchangeable sensor
- HMP4 for high-pressure applications
- HMP5 for high temperature
- HMP7 for constant high humidity
- HMP8 for pressurized applications
- HMP9 for rapidly changing environments
- TMP1 for demanding temperature measurements
- Plug & Play compatible with Indigo series

#### Hydrogenperoxideprobe with humidity and temperature ...

- Excellent long-term stability
- Measurement temperature range 0...100 % rF, +5 ... +50 °C
- Corrosion-resistant stainless steel housing, IP65
- compatible with the Indigo Transmitter
- Traceable calibration certificate
- Standalone probe with digital Modbus RTU over RS-485 or 2 analog outputs
- for bio-decontamination

## Humidity- and Temperaturetransmitter for demanding humidity measurement ...

- HMT331 for wall mounting
- HMT333 for duct mounting and tight spaces
- HMT334 for high pressures
- HMT335 for high temperatures
- HMT337 for high humidity and meteorological applications
- HMT338 for pressurized pipelines

#### HMT360



## Intrinsically Safe Humidity and Temperature Transmitters for explosive environments ...

- HMP361 for wall mounting
- HMP363 for confined spaces
- HMP364 for high pressure
- HMP365 for high temperature
- HMP367 for high humidites
- HMP368 for pressurized pipelines

HMT310



HMT120/130



HMP60/110



## Humidity- and temperaturetransmitter for demanding industrial applications ...

- small size, easy to integrate
- full measurement 0...100 % RH
- Temperature range up to +180°C
- Insensitive to dust and most chemicals
- NIST traceable calibration (certificate included)

#### Humidity- and Temperaturetransmitter for Cleanroom-Applications ...

- Easy maintenance on site through interchangeable probe
- Wall-mounted or with a remote probe
- Enclosure IP65
- Resistant to dust and most chemicals
- Suitable for cleanrooms and demanding HVAC and light industrial applications

#### Feuchte- und Temperatursonde im Miniaturformat...

- ±1.5 %RH measurement accuracy
- Low power consumption
- Measurement range: 0 ... 100 %RH; -40 ... +80 °C
- IP65 metal housing
- Optional RS-485 digital output supports Modbus RTU
- Optional dew point calculation

## PROCESS | MOISTURE IN OIL

#### **OPT100**



#### **MHT410**



#### MMT330/310



**MMT162** 



#### DGA Monitor for Power transformers ...

- Gases H<sub>2</sub>, CO, CO<sub>2</sub>, CH<sub>4</sub>, C<sub>2</sub>H<sub>6</sub>, C<sub>2</sub>H<sub>4</sub>, C<sub>2</sub>H<sub>2</sub>, H<sub>2</sub>O
- IP66 housing
- Unique auto-calibration eliminates long-term drifts
- Continuous real-time monitoring
- Browser-based user interface
- Installation and commissioning in less than two hours

#### Moisture-, Hydrogen- and Temperature Transmitter ...

- Monitors health of the transformer in real time
- Measures moisture and hydrogen directly in representative oil
- Real-time warning on transformer faults
- Unique probe design, robust and easy to install
- Housing Classification IP66

#### Moisture and Temperature Transmitter Series for Oil ...

- Continuous online measurement of moisture in oil
- Installation through ball valve, no need to shut down the process
- Proven Vaisala HUMICAP<sup>®</sup> sensor
- Transmission over LAN or WLAN
- Integrated data logging, with over four years of measurement history
- Traceable calibration to national standards

#### Compact Moisture in Oil and Temperature Transmitter ...

- Continuous measurement of moisture in oil
- Excellent pressure and temperature tolerance
- Digital output RS-485 with Modbus
- Proven Vaisala HUMICAP technology
- Compact, accurate and economical
- Compatible with MI70 evaluation unit

## PROCESS | DEWPOINT

### Indigo 200 Series



### **Intelligent Probes**





#### **DMT340**



### DMT143(L)



#### Series 200 Indigo Transmitter...

- Plug-and-play probe connection for Vaisala Indigo compatible probes
- Wireless interface for configuration and temporary use
- Operating Temperature: -40 ... +60 °C, with display -20 ... +60 °C
- LCD-Farbdisplay (Analogmodell optional ohne Display)
- IP65 enclosure
- 24 V power supply input

#### Dewpoint probes with digital modbus RTU transmitter ...

- DMP5 for inline measurement at high temperatures <180 ° C
- DMP6 for inline measurement at very high temperatures < 350°C
- DMP7 for remote installations in confined spaces
- DMP8 with adjustable installation depth for pressure lines (<40 bar)

#### For demanding applications with low humidity ...

- Measures dew point from -70 ... +80 °C with an accuracy of  $\pm 2$  °C
- Vaisala DRYCAP Sensor for accurate measurements
- Optional alarm relays and mains power supply module
- Graphical display and keypad for
- convenient operation
- Up to three analog outputs, RS-232/485, LAN
- Unique auto-calibration feature maintains accuracy over long term

#### Miniature Dewpoint Transmitter for OEM Applications ...

- Ideal choice for industrial drying facilities
- Long-term stability even at low temperatures
- Two sensor types to cover the entire measuring range from -60 ... + 60 ° C
- Compatible with the portable dew point meter DM70
- High response speed
- Insensitive to condensation

#### **DPT146**



#### Dew point and pressure sensor for Compressed air ...

- The first transmitter that monitors both dew point and process pressure
- Highly accurate humidity information thanks to dew point data coupled with live pressure input
- Compatible with the Vaisala Hand-Held DM70 for easy spotchecking, local display and data logging
- Dew point: -70 ... +30 °C

#### DMT345/346

#### Dewpoint Transmitters for High Temperature Applications ...

- DMT345 measures humidity at temperatures up to 180 °C
- DMT346 measures humidity at temperatures up to 350 °C
- Unique auto-calibration feature
- Graphical display and keypad forconvenient operation
- Provides accurate and reliable measurement with excellent long-term stability and fast response time
- Condensation-resistant



#### VG, VT



#### VDt, VDU, VDtL



PASVE



**PASVE S, HS** 



# Pressure / level transmitter for measurements in gases, vapors and crystallizing liquids ...

- In analog technology and as a smart device (HART<sup>®</sup>)
- For the measuring range 0.1 ... 100 MPa
- Excellent temperature compensation
- Is equipped with a piezoresistive sensor
- Measuring range dynamics 100: 1
- Hygiene certificate EHEDGE
- Accuracy +/- 0.05% of the span

## Differential pressure transmitter for measurements of level, flow, differential pressure and density ...

- In analog technology or as a smart device (HART<sup>®</sup>)
- For the measuring range min. Measuring range 0-0.01 kPa, max. Range 0-15 MPa
- Is equipped with a piezoresistive sensor
- Accuracy +/- 0.05% of the span

## Special ball valve for level, PH and Pressure transmitter ...

- Transmitters can be easily and safely disconnected from the process for maintenance and cleaning without interrupting the process
- Available with electric and pneumatic drives or as manual operation
- operating Temperature -50°C ... +200°C
- Different materials and diameters available
- Many pH probes can be adapted

#### Hygiene Sample System...

- Easy and safe installation
- Simple and error-free operation
- 10 bar, 120 ° C max. Process

#### 454FTB/K-BAR 2000



#### 534FT/504FTB

#### **Vortex VA**

### **Thermal TA**



- Ideal for harsh environments (dust, chemicals, wet gas)
- Inline Meter
- Highly dynamic measurements up to 325m / s
- For measurements up to 500 ° C
- QAL1 Certified
- Multipoint measurement

#### Inline mass flow meter for gases ...

- Ideal for harsh environments (dust, chemicals, wet gas)
- Measuring tube
- Highly dynamic measurements up to 11,000 Nm3 / h
- low pressure drop (patented technology)
- short inlet and outlet sections
- Measuring tube available in 1/2 "to 8"

#### Vortex meter for flow measurement in gases ...

- Low pressure loss and high measuring dynamics with measuring range start from 0.5 m / s
- Vortex as immersion sensor
- High long-term stability, without moving parts
- Insensitive to particles and condensate
- For measurements according to TA13. and 17th BImSchV
- SIL2 and for use in Ex areas

#### Thermal flow measurement in gases ...

- Special design for the continuous measurement of laminar flows
- Measuring dynamics from 1: 1000 (0.2 ... 200m / s)
- Various gas curves (air, argon, etc.) stored for quick commissioning on site
- Configure on site using the easily exchangeable housing cover with display and buttons



## **PROCESS** | FLOW GASES

### Vane Wheel FA



#### UF811/821/831/841





 $\langle \mathbf{E} \mathbf{x} \rangle$ 

#### SE1714/1586/1662



#### Vane anemometer for flow measurement in liquids / gases ...

- High response behavior and no braking effect thanks to proximity sensor as speed sensor
- Extremely robust bearings for a wide range of applications
- Optionally with direction detection for precise detection of bidirectional flow velocities
- Frequency adjustment and calibration for easy replacement of flowmeters of the same type
- Also suitable for aggressive media with temperatures up to 550 ° C

#### Ultrasonic flow meter for liquids ...

- Measures the speed of the liquid with ultrasound
- Calculates the average speed in the pipe or flow
- ATEX, Modbus, relays, analog outputs
- UF841 especially for EEX areas
- Control of the ultrasound signal (Echo Shape)

#### External probe sets for ultrasonic flow meters ...

- Push-pull clip-on probes
- Depending on the probe, temperatures from -10 ° C to + 180 ° C
- IP protection type: IP67
- Outer tube diameter from 10mm to 10000mm

### **PROCESS** | FLOW CORIOLIS / VORTEX

#### **ALTImass**



#### **VORTEX-Flow meter**



#### Positive Displacement Flow meter



#### Coriolis Durchflussmesser mit hoher Genauigkeit...

- Type U U-shaped, highest accuracy, temp. Up to + 350 ° C
- Type S straight pipe, for clean processes, temp. Up to + 130 ° C
- Type B small size, low price, temp. Up to + 125  $^\circ$  C
- Illuminated display with alarm function
- Fast response time, even for low flow rates
- Improved zero point stability
- For hygiene applications, EHEDG certificate
- Can be used for the high pressure range up to approx. 120MPa

#### Vortex flow meter for high temperatures ...

- Operating temperature up to + 460 ° C
- Flow meters also available with pressure compensation
- IP66 (DC), IP65 (battery operated)
- Low pressure loss due to the lack of moving parts
- Interchangeable sensor
- High repeatability
- Smart Type / Smart Communication Unit

#### Flow meter with displacement principle ...

- No external energy is needed
- The flow rate is calculated from the number of revolutions of a rotor
- High measuring accuracy, low pressure loss
- For a wide range of applications
- High repeatability
- Also for high temperatures up to + 200 ° C

### PROCESS | CARBON DIOXIDE

#### **INDIGO 201**



#### GMP251/GMP252



**GMP343** 



#### **GMP231**



#### Transducers with analog outputs ...

- Safe use in extreme environments: insensitive to dust and most chemicals
- Simple visualization and evaluation of data, also via WLAN
- Plug-and-play connection for Vaisala probes
- IP65 housing
- Wireless interface for configuration
- 3 analog outputs

#### CO2 probes for measurements in the volume percentage range and in the ppm range with digital Modbus RTU transducer ...

- Measuring range 0 ... 10000ppm CO2 and 0 ... 20% CO2
- Intelligent standalone probe with analog and digital outputs
- Wide operating temperature range from -40 ... + 60 ° C
- Housing with protection class IP65
- Heated sensor head to avoid condensation
- Complete temperature and pressure compensation
- Can be connected to the Indigo host device

#### Carbon dioxide probe for demanding measurements ...

- Single-beam / bi-frequency CO2 measurement with no moving parts
- Highest accuracy and stability
- Compensation options for temperature, pressure, humidity and oxygen
- Low power consumption and heat emission
- Designed for outdoor applications
- Compact and light

#### Carbon dioxide probe for CO2 incubators ...

- Sensor temperature resistant up to + 180 ° C
- Designed for OEM use with CO2 incubators
- Integrated pressure and temperature measurement improves accuracy and stability
- Heated sensor head to prevent condensation
- Latest infrared CO2 sensor technology
- Traceable 4-point CO2 calibration

## **PROCESS** | GAS ANALYSIS

#### System 400



#### LD 500



### 02000



**MGP261** 



#### Continuous emission monitoring ...

- Based on the Opsis UV / FTIR-DOAS technology
- Fast response and optimal detection of all gases
- A single system can record all gases relevant to emissions monitoring
- Built-in internet interface and web logger
- Works with a minimum of maintenance
- NO, NO2, SO2, H2O, CO2, HCI, HF, NH3

#### Laser diode gas analyzer ...

- Represents the central unit in a laser diode gas monitoring system
- Integrated PC with LCD display
- Can accommodate up to 3 laser diode modules
- Measurement on up to 8 measuring sections possible
- Fast measuring method

#### Oxygen gas analyzer ...

- Continuous on-site oxygen measurement
- Easy installation and commissioning
- Two probes can be used per analyzer
- Galvanically isolated current and alarm outputs
- Modbus RTU communication (option)

## Multi-gas measuring probe for methane, carbon dioxide and moisture ...

- Excellent long-term stability and repeatability with proprietary infrared technology
- Direct installation in the process
- The probe heating prevents condensation in high humidity environments
- Corrosion-resistant stainless steel housing (IP66)
- Certified for Ex zone 0/1

#### VOM, VOA



#### Turbidity and solids analyzer for measuring liquids ...

- Measuring range: 0 ... 300,000 NTU
- Temperature: -30 ° C to 140 ° C
- Pressure: PN40 1 to 250 bar
- EHEDG certified
- Reflective measuring principle
- CIP processes, filter monitoring, interface measurement
- Cost and time savings
- Freely scalable and calibratable measuring ranges

## VOF/VOD

VC



#### SAVE



### Turbidity and solids analyzer for the food and biopharmaceutical industry ...

- Measuring range: 0 ... 1500 NTU
- Temperature: -30 ° C to 140 ° C
- Pressure: PN40 -1 to 250 bar
- EHEDG certified
- Absorbing measuring principle
- Automation, filter monitoring, reverse osmosis, separator
- Monitoring of clean water, yeast after the membrane in breweries, ...

# Optical consistency meter for measuring the overall fabric density, ash content and Schopper-Riegler ...

- Accurate and reliable consistency measurements without regular maintenance up to 12% Cs
- Can be connected to and removed from the process using a 1 "ball valve connection
- Safe removal of the transmitter without stopping the process automatic cleaning possible
- Process temperature from -30 ... + 140 ° C
- Easy calibration

#### Sampling valve for all types of pulp ...

- For the safe sampling of pulp
- Consistency range: 0 ... 18% Cs
- Manual or pneumatic operation
- Water flushing



### DT90(L)



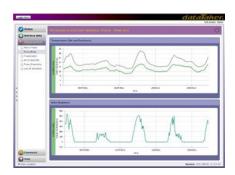
### DT80 / DT85



CEM20



### **Software Datataker**



#### Intelligent multi-purpose data logger ...

- 10 to 48 analog inputs
- Robust, stand-alone, low-power data logger
- Up to 10 isolated or 15 common analog inputs in many combinations
- Can be expanded to up to 960 analog inputs
- USB memory for easy data and program transfer
- 2 serial Smart Sensor connections, SDI12, Modbus
- WiFi, Ethernet
- WEB server, FTB

#### Intelligent multi-purpose data logger ...

- 10 to 48 analog inputs
- Robust, stand-alone, low-power data logger
- Up to 10 isolated or 15 common analog inputs in many combinations
- Can be expanded to up to 960 analog inputs
- USB memory for easy data and program transfer
- 2 serial Smart Sensor connections, SDI12, Modbus
- WiFi, Ethernet
- WEB server, FTB

#### Channel expansion module for DT80 series ...

- Extension of the number of channels for the DT80 / DT85 by 20 channels
- With the DT80, the number of channels increases to 300 analog inputs, with the DT85 to an incredible 960 inputs

#### Software, firmware and drivers ..

- dEX 2.0: simple representation of the measured values in tables, diagrams and graphics
- DataTaker Live: Data acquisition and monitoring from your PC, smartphone or tablet
- USB flash drive firmware
- Modem firmware
- USB driver
- DataTaker Labview driver

## **PROCESS** | DISPLAYS / CONVERTER



## HVAC | HUMIDITY

#### HMT120/130



HMD62



HMDW80



**HMDW110** 



#### Humidity and temperature sensors for clean rooms and demanding HVAC applications ...

- Configuration with two-wire loop supply or three-wire voltage
  output
- Room sensor or with cable probe
- Resistant to dust and most chemicals
- USB cable for PC connection available for maintenance purposes
- Traceable 3-point calibration
- Housing protection class IP65

#### Humidity and temperature sensors for channels ...

- For light industrial applications and demanding HVAC applications
- Measuring accuracy up to  $\pm$  1.5% RH and  $\pm$  0.1  $^{\circ}$  C
- 4 ... 20 mA analog output
- Insensitive to chemicals and dust
- IP66 rated housing

## Humidity and temperature sensor series for standard HVAC applications ...

- Room temperature sensor TMW82 / 83
- Combined room humidity / temperature sensor HMW82 / 83
- IP65-classified, room humidity / temperature sensor HMW88 / 89 (D) with and without display for wet areas
- Combined duct humidity / temperature sensors HMD82 / 83 (D) with and without display
- Combined outdoor humidity / temperature sensor HMS82 / 83

## Humidity and temperature sensor series for high-precision measurements in HVAC applications ...

- IP65 classified humidity / temperature sensor HMW110 / 112 for wall mounting in wet areas
- Humidity and temperature sensor HMD110 / 112 for duct mounting
- Combined outdoor humidity / temperature sensor HMS110 / 112
- Accuracy of ± 2% RH
- On-site calibration with HM70 handheld measuring device

#### PUC24/PUC28



#### **P26**



#### P34



#### **PS17**



#### Clean room panels for climate data display ...

- Measuring ranges:  $\pm$  100 Pa or  $\pm$  250 Pa freely scalable within this range
- Integrated, highly accurate differential pressure measurement
- Stainless steel solvent-resistant surface
- 3 analog outputs, optional digital interface
- Acoustic alarm when the set limit is exceeded, can be acknowledged using the button
- Optical alarm signal when warning values are exceeded
- Process panel also available in polished aluminum

#### Differential pressure transmitter for top hat rail or wall mounting ...

- Pressure transmitter with freely scalable measuring range:
- 10/50/100/250/500 Pa, 1 / 2.5 / 5/10/20/50/100 kPa
- Protected against pressure peaks and incorrect operation
- 2 adjustable limit switches enable the connection of e.g. B. fans or signal generators
- Saving additional circuitry
- Can also be used for volume flow measurement or with the "Air meter" option for recording air consumption

#### Differential pressure transmitter with minimal External dimensions - ideal for installation in control cabinets ...

- Measuring ranges: 10/50/100/250/500 Pa, 1 / 2.5 / 5/10/20/50/100 kPa, freely scalable from 10 .. 100% within a measuring range
- Optionally with temperature analog input and internal stat. Pressure sensor for P- / T-compensated volume flow
- Optional with relay
- Volume flow configurable via k-factor, dPmax / Vmax or 20 individual values
- USB interface: via PC software (password-protected) scaling, characteristic curve shape and much more parameterizable

#### Compact pressure transmitter for basic applications ...

- Measuring ranges: 50/100/200/500 Pa, 1 / 2.5 / 5/10 kPa
- Robust ABS housing with IP 65 for top hat rail or wall mounting (with only 2 screws)
- Optionally with a defined measuring range or switchable between 4 measuring ranges each
- Selectable output signal 0/2 .. 10 V or 0/4 .. 20 mA
- Selectable attenuation of the output signal of up to 10 s

### Transducer



### Pitotrohre



### **Flowgrids**



#### Air velocity transducer for measurement in research laboratories and manufacturing processes ...

- Measuring range: 0.125 50 m / s
- Protected probe tip
- Available with probe lengths 7.5 cm, 15 cm, 22.5 cm and 30 cm
- Resistant ceramic sensor
- Wide range of measurement applications

# Pitot tubes made of stainless steel with an elliptical head shape ...

- Measurement of the flow velocity of air or gases in air lines and ducts
- Pitot tube for measuring the total pressure and a probe for measuring the static pressure
- High temperature resistance (up to + 800 ° C)
- Large selection of lengths and pipe diameters
- Reduction of the measurement error by different flow angles

## Volume flow differential pressure transmitter for measuring the flow in air ducts ...

- Suitable for round or square channels
- Precise installation in the sewer
- Numerous measuring points with pitot tubes arranged in parallel as a grid or star-shaped around a hub
- Highest accuracy
- Round storage grids are available in stainless steel or optionally in aluminum (150 .. 560 mm)
- Small inlet and outlet sections

#### **CMS** - Viewlinc



#### HMT140



### Datenlogger



#### **RFL100**



## Continuous surveillance system from Vaisala for the life science sector ...

- Seamless monitoring even during power and network failures
- Real-time monitoring and alarms with customizable reports
- Easy installation and validation with optional IQOQ protocols
- Includes software, data loggers and measuring devices as well as services

#### Wireless transmitter for Vaisala monitoring system ...

- Monitoring of temperature, relative humidity, current, voltage and switch contacts
- Wireless transmitter HMT140 for monitoring numerous life science applications
- With Wi-Fi functionality, interchangeable probe, LCD display
- Autonomous operation and alarms on site
- Fast and easy WiFi connection to the viewLinc monitoring software

#### Data logger for the Vaisala surveillance system ...

- Temperature logger all data is recorded and saved at the measuring point
- Voltage and current loops Data logger records 4-20 mA current loops or DC voltage signals
- Thermocouple data logger for monitoring extreme temperatures
- Universal data logger for monitoring analog voltages or 0-20 mA currents

#### Wireless humidity and temperature data logger for the Vaisala monitoring system ...

- Secure, long-range wireless connection
- Strong signal, low power consumption
- Measuring probe HMP115 in a plastic housing can be integrated or operated by cable
- The HMP110 probe in a stainless steel housing is suitable for extreme conditions and is used as a cable probe
- TMP115 temperature probe for the temperature range from -196  $^\circ$  C ... + 90  $^\circ$  C

### HVAC MONITORING

#### **PDT102**



7310/7510

#### Differenzdruckmesswertgeber für Reinräume und Monitoring -Systeme...

- Measuring range:  $\pm$  50 Pa  $\pm$  0.25 in H2O
- Temperature range: -29 to + 70 ° C
- On-site system calibration and online monitoring without affecting the pressure lines
- Ultra-thin profile, perfect for mounting on the DIN rail
- High accuracy, two options: 0.25% or 0.50% of the measuring range
- Extremely robust MEMS silicon sensor technology enables maximum precision

#### Aerotrak Remote Particle Counter for Monitoring Cleanrooms ...



- Acquires up to 4 particle sizes simultaneously
- Size range 0.3 to 10 μm
- Flow rate 28.3 I / min
- Memory for 3000 recordings of samples
- Configuration on site or via web browser
- Stainless steel case

### ENVIRONMENT | METEOROLOGY

#### WXT530



PTU300



Rain[e]



HMP155



#### Multisensor weather transmitter - weather data in real time ...

- Measures the 6 most important weather parameters such as air pressure, temperature, humidity, precipitation, wind speed and wind direction
- Analog sensors can be connected
- Compact and light
- Quick and easy to install
- Energy and cost efficient

#### Combination transmitter for pressure, humidity and temperature for demanding applications ...

- Available with two sensors for air pressure measurement for additional security
- Serial RS232C interface with NMEA protocol for GPS applications
- Analog outputs, RS232 / 485, LAN
- Modbus protocol support (RTU / TCP)
- Graphic display and keyboard for convenient operation

#### Weighing precipitation sensor with excellent accuracy ...

- Self-draining monolithic precision rocker
- Double gravimetric precipitation sensor
- high resolution 0.001 mn / m<sup>2</sup>
- Collection area 200 (400) cm<sup>2</sup>
- All-metal housing, weatherproof and durable
- Compact and robust design (weight only 2.5 kg)

## Humidity and temperature probe for demanding outdoor measurements ...

- Optional heated moisture probe and chemical sensor cleaning
- Plug-and-play principle
- USB interface for maintenance purposes
- Suitable for radiation protection housings and for Stevenson-WetterHütte
- Protection against water jets according to IP66

#### **Fence-Line**



#### SM200



### **Environmental Dusttrak**



### **AQT400**



#### Air quality monitoring with Fence-Line ...

- For measurements of volatile gases and gas leaks in industrial areas
- Can measure all relevant gas components such as NO, NO2, SO2, O3, BTX, HNO2, NO3, formaldehyde and NH3
- Non-contact DOAS measurement method
- High reliability at low costs
- MCERTS certificate guarantees a calibration interval of one year

#### Dust sampler and suspended dust monitoring device ...

- Suitable for both automatic particulate matter measurement and for filter sample collection
- Optionally with sampling heads type PM10, PM2.5 or TSP for volume flows of 2.3 m  $^3$  / h or 1.0 m  $^3$  / h
- Data storage: 120 days (with 24-hour sampling)
- Aerosol concentrations from 0.001 to 150 mg/m<sup>3</sup>

## Aerosol monitor in tamper-proof environmental protection housing ...

- Remote-controlled real-time data acquisition solution that is ready for use in less than an hour
- Early detection functions enable timely interception of sources of increased air pollution
- Simultaneous measurement according to size of separate mass fraction concentrations corresponding to the dust fractions PM 1, PM 2.5, respirable, PM 10 and total dust fraction
- Aerosol concentrations from 0.001 to 150 mg/m<sup>3</sup>

#### Air quality transmitter for harmful gases and particles ...

- AQT410 measures the most common gaseous pollutants nitrogen dioxide, sulfur dioxide, carbon monoxide and ozone
- In addition to these pollutants, AQT420 measures fine dust (PM2.5 and PM10) in the ambient air
- RS-232 and RS-485 interfaces for local connectivity (such as Modbus support)
- Compact design, easy to use

### DT80M/DT80G



#### AM520/AM520I



# Data logger DT80M with integrated modem and data logger DT80G for geotechnical applications ...

- DT80M with an integrated 2G / 3G modem
- DT80G support vibrating wire sensors such as Geokon, Slope Indicator, RST Instruments, ...
- Dual channel concept enable up to 10 isolated or 15 common analog inputs
- USB memory for easy data and program transfer
- Web interface, FTP server
- Can be expanded to up to 300 analog inputs

#### Personal carried aerosol monitor SidePak ...

- Real-time measurement of mass concentrations and data logging for on-site data analysis
- Aerosol mass concentration measurements for PM10, respirable, PM2.5, PM1 and 0.8  $\mu m$  DPM
- SidePak AM520I is IECEx and ATEX certified for use in explosive environments
- User-selectable alarm levels for alarming the employee
- Powerful battery and OLED color display

### HANDHELD METERS | HUMIDITY / MOISTURE IN OIL / DEWPOINT

#### HM70



HM40



**MM70** 



**DM70** 



## Portable humidity and temperature measuring device for demanding sample measurements ...

- Designed for sample measurements and on-site calibration
- Graphical display of measured value trends
- Three probe designs with temperature measuring ranges between –70 and +180  $^\circ$  C
- Simultaneous connection of 2 probes also dew point and CO2 probes possible
- Display of derived moisture values

## Portable humidity and temperature measuring devices for quick checks and random measurements ...

- HM41 humidity and temperature measuring device compact standard model
- HM42 humidity and temperature measuring device with 4 mm thin cable probe
- HM45 humidity and temperature measuring device with standard cable probe
- HM46 humidity and temperature measuring device with long stainless steel cable probe

#### Portable moisture meter for sample measurements in oil ...

- Measurement independent of the type, age and temperature of the oil
- Use via ball valve directly in the process without draining oil
- High pressure and temperature resistance
- Compatible with stationary Vaisala oil moisture sensors
- Multi-probe operation; Probes for dew point and CO2 can also be connected
- Robust and reliable design

## Portable dew point meter for spot checks and for on-site calibrations ...

- High response speed thanks to the sensor cleaning function
- Data storage and transfer to a PC with MI70 Link software
- Condensation-insensitive sensor
- Multi-probe operation; Relative humidity and carbon dioxide probes can also be connected
- Three probe types for dew point measurements in the range -60  $_{\rm ...}$  + 60  $^{\circ}$  C

## HANDHELD METERS | FLOW / GASES

(Ex)

### **Flowtherm NT/EX**



### **UF801/Minisonic II**

#### Portable Air Velocity Meter 2445



#### GM70



#### Flow handheld measuring device with a wide range of applications, even in EX areas ...

- Measurements with up to three sensors can be displayed simultaneously
- Data logger enables the storage of up to 40,000 measurements with date and time
- Up to 100 different profiles for users or measuring points can be stored
- USB interface simply transfer logged data to the PC and configure the device

#### Mobile ultrasonic flow meter for liquids ...

- Highly visible OLED display
- Accurate, constant and reliable results, even under extreme measuring conditions
- For all types of pipes, even very worn pipes with or without insulation
- For all types of liquids (water, chemical products, mineral oil products, ...)

#### Portable flow meter for the high temperature range ...

- Made for very high temperatures up to 500 ° C (such as coal-fired power plants and air ducts)
- Available in five fixed lengths
- Robust, welded construction ideal for dirty and corrosive environments
- All-metal display module, charger, carrying case and accessories

#### Portable carbon dioxide meter for random measurements ...

- Choice of diffusion or pump aspiration
- Numerical and graphic representation of all measured values
- Functions for data acquisition and transfer to a PC using the MI70 Link program
- Easy recalibration through interchangeable probes
- Suitable for functional testing of stationary CO2 sensors

## HANDHELD METERS VENTILATION TECHNOLOGY

#### SQ2020



#### EMA200



### Accubalance 8380



### VelociCalc 9565



#### Powerful data logger for all applications ...

- High performance, easy to understand features and universal input channels
- Compact and portable instrument
- Several analog / digital converters, inexpensive storage media, high measurement resolution and storage capacity
- Easy to understand software
- Independent data acquisition and online recording with PC / notebook

#### Portable digital manometer with min / max value memory ...

- For measuring differential pressure and flow velocities
- High accuracy and long-term stability
- Low zero drift, hysteresis and temperature dependence
- 4 measuring ranges available
- Scalable analog output
- Ideal for customer service and maintenance work, e.g. B. on heating, ventilation and air conditioning systems

## Volume flow hood for measuring the air volume on diffusers and grilles ...

- High flexibility due to removable micromanometer
- Optional probes for other measurement applications
- Stable and trouble-free operation
- Light and ergonomic measuring hood
- Contributes to the creation of a healthy and energy efficient environment
- Automatic recording and display of supply and exhaust air flows saves time at work

#### Portable multifunction ventilation test instrument ...

- Large selection of plug-in probes (VOC probe, TA, FA, ...)
- Available with or without differential pressure sensor
- For air speed, temperature, humidity, CO and CO2
- Calculate volume flow, heat flow, degree of turbulence, wet bulb temperature and dew point temperature
- In the case of a calibration, only the probe needs to be sent back

#### Dussttrak 8533EP



#### Aerotrak 9310/9510



#### Aerotrak 9303/9306



#### Air Pro AP500/AP800



#### Dusttrak DRX aerosol monitor for real-time dust monitoring ...

- Stationary battery-operated laser photometer with external pump, scattered light measurement and data logging for real-time measurements of aerosol masses
- No other device can measure mass and particle size at the same time
- Energy saving, durable external pump
- Automatic zero point reset
- Aerosol concentration range 0.001 to 150 mg / m<sup>3</sup>

#### Portable particle counter for monitoring particle contamination ...

- Size range 0.3 (0.5) to 25 μm
- Can be used independently as a portable particle counter or integrated in system monitoring systems
- Display of up to three environmental parameters
- With the integrated 5.7-inch color touchscreen
- Can store up to 10,000 sample records
- Reports for ISO 14644-1, EU GMP guidelines Appendix 1 and FS209E

#### Manual particle counter for monitoring particle contamination ...

- Size range 0.3 to 25 μm
- Meets all requirements of ISO 21501-4
- Built-in handle for one-handed operation
- External reporting for ISO 14644-1, EU GMP and FS209E via TrakPro ™ Lite Secure
- Data overview directly on the display

#### Portable air speed meter AP500 and micromanometer AP800 ...

- AP500 includes a barometric pressure sensor to correct the air density
- AP800 includes a differential pressure sensor to measure differential pressure and static pressure, a barometric pressure sensor to correct air density
- Integrated display, buttons and a lithium-ion battery
- Application software for display, logging, real-time measurement and calculations on portable devices

## **SERVICE** | TEMPERATURE

#### **Pyros**



#### Quartz



Fluid



Pulsar



#### Compact metal block temperature calibrators ...

- Temperature range: -24 ° C to + 650 ° C
- Serves as a temperature source and reference device in one
- For testing and calibration of temperature measuring devices of all kinds
- Compact and light
- Different block inserts with different holes available for test specimens
- Particularly proven on board ships (marine industry)

#### Metallblock Temperaturkalibratoren...

- Temperature range: -30 ° C to + 150 ° C
- Serves as a temperature source and reference device in one
- For testing and calibration of temperature measuring devices of all kinds
- Compact and light
- Different block inserts with different holes available for test specimens
- Retrofitting of "black body" for the calibration of non-contact infrared thermometers possible

#### Temperature calibration bath ...

- Temperature range: -8 ° C to + 250 ° C
- Ideal for the calibration of glass thermometers and laboratory thermometers
- Compact and light
- Computer controlled calibrations via RS232 interface
- Option: conversion to metal block temperature calibrator

#### Metal Block Temperature Calibrator ...

- Temperature range +20 ... + 550 ° C
- Immersion depth for test objects 275 mm
- Ramp function
- Thermostat tests
- Computer controlled calibrations via RS232 interface
- Different block inserts with different holes available for test specimens

## **SERVICE** | FEUCHTE / DRUCK

#### Solar



#### **HMK15**



#### KAL100/200/84



#### Metal Block Temperature Calibrator ...

- Temperature range +200 ... + 1100 ° C
- Ramp function
- Thermostat tests
- Computer controlled calibrations via RS232 interface
- Different block inserts with different holes available for test specimens

#### Salt bath calibrator for laboratory and on-site calibrations ...

- In addition to laboratory use, it is also suitable for calibration purposes directly at the measuring location
- The HMK15 can be easily transported to the respective place of use thanks to the special vessel lid
- Based on the principle of saturated salt solutions
- Certified ready salt packs available
- No power supply required
- Fast temperature compensation

#### Pressure calibration devices with integrated pressure generation ...

- Pressure gauges for low pressures from 10 Pa can be easily checked and calibrated
- High accuracy and long-term stability thanks to automatic zero adjustment
- Simple menu navigation for switching units, setting calibration points and specifying the measuring span
- Generation of positive and negative differential pressures
- DAkkS calibration certificate

## **REPAIR- & CALIBRATIONSSERVICE**

#### Repair



Calibration



We offer you a quick repair service including all necessary spare parts, an accredited certificate or a factory calibration cerificate with a service report.

The repair includes:

- Workload
- Spare parts required
- Calibration certificate
- Service report

Regular calibration ensures that your measuring devices continously provide accurate and high-quality data. Calibrations caried out in our service center are treaceable and corresbond to ISO 9001.

The calibration includes:

- Calibration and certificate before adjustment
- Adjustment according to specification
- Calibration and certificate after adjustment
- Exchange of wear parts

## NOTES

## NOTES

#### **INDUSTRIE AUTOMATION GRAZ**

Ing. W. Häusler GmbH Autaler Straße 55 - A 8074 Raaba-Grambach T: +43 316 405 105 - F: +43 316 405 105 22 office@iag.co.at - www.iag.co.at