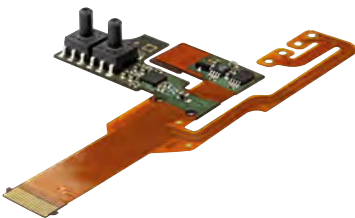
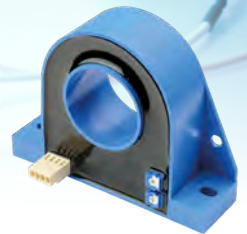
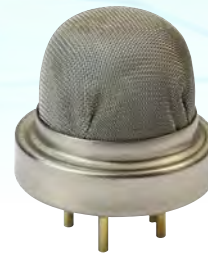
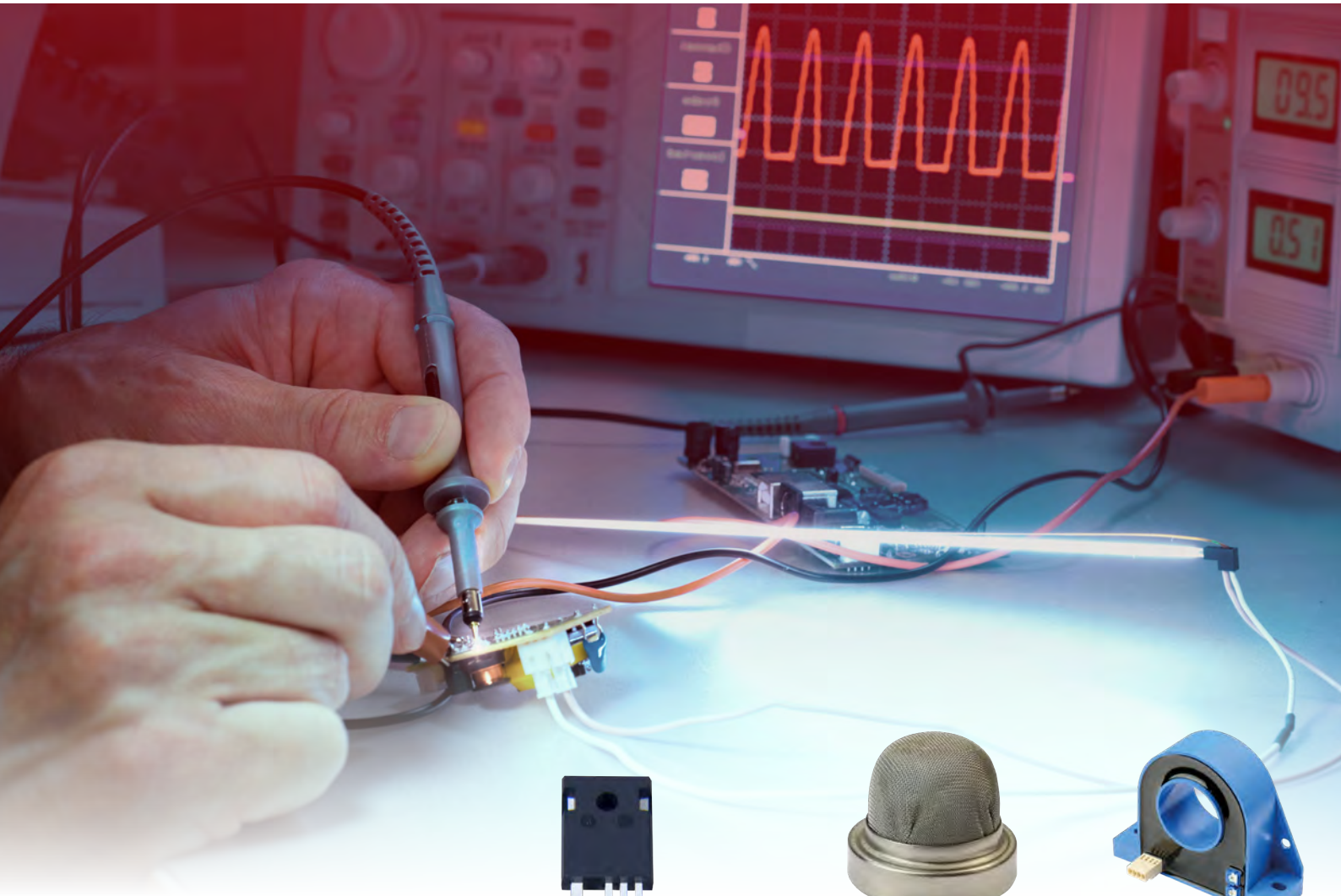


Sensor, drive and power solutions.
Worldwide.



Experts on Design-In
for sensors and power solutions



Angst+Pfister Sensors and Power is a fully owned subsidiary of the Angst+Pfister Group, based in Zurich.



Experts on Design-In

As part of the international Angst+Pfister Group, we have long offered high-quality sensor technology, power supply and drive technology solutions to customers worldwide. We will now reflect that affiliation in a new name. From March 1, 2021, Pewartron will be known as "Angst+Pfister Sensors and Power".

While our name will change, some things won't – you can still count on us for the same high level of service and high-quality products. For more than 30 years, our company has been synonymous with technical consultations and support, quick responses to new requests and tailor-made solutions in the field of advanced sensor technology and power solutions.

Ideally, we begin our consultation before the start of the product development process and advise you on both technical and commercial aspects. We provide support through all of your development phases – which may even last several years – to the final series launch, and ensure smooth delivery of a high-quality final product.

You can rely on:

- Our 15-strong team of engineers with an average of 20+ years of experience in advanced sensor technology and power solutions
- Our project management skills to take you through all phases of new product development projects
- Technologically focused consultations that aim to find the most commercially attractive solutions for you and the end user
- A very broad range of projects, including integrated sensor elements, sensor modules, customer-specific sensor solutions and standard or customized power products
- Our own Angst+Pfister Sensors and Power-branded products and strong collaborations with renowned, technologically leading manufacturers whose products

we distribute and who, like us, focus on high quality at affordable prices

- Reliable and innovative standard products
- Modular solutions and tailored solutions to best meet customer requirements
- Samples and development models available at short notice
- More than 5,000 items stored at our logistics center available in less than 48 hours
- Personalized and friendly customer support

Your contacts at Angst+Pfister Sensors and Power



Try working with us. Our team is looking forward to hearing from you – by phone, email, an order on our website or your own preferred method of contact.





Pressure sensors

- Gauge, absolute and differential pressure
- Various housings and different technologies
- 0.25 mbar to 1,000 bar



Pressure measuring cells

- Ceramic, oil-filled and silicon
- With or without process connection
- Small and compact



Pressure transmitters

- Standardized and customized solutions
- Different technologies
- ATEX-certified variants



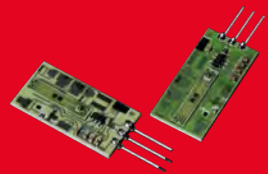
Pressure switches

- Various membranes for different media
- Fixed or configurable
- 0.1 mbar to 600 bar



Flow sensors

- Standardized and customized solutions
- Different measurement principles (thermal, differential pressure or ultrasonic)
- For gases and liquids



Load cells

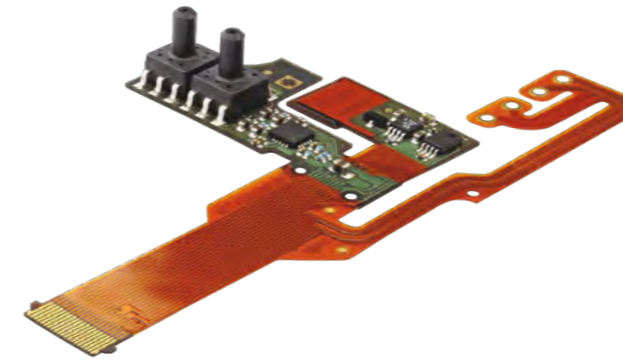
- Compact design
- Standardized or customized
- 400 mN to 9,000 N



Sensing materials

- Sensor technology directly integrated in materials
- For measuring load, pressure, weight, temperature and more
- Cutting-edge technology

Pressure, load and flow sensors



Gas sensors



Oxygen sensors & modules

- Zirconia oxygen, paramagnetic and optical technologies
- Suitable for oxygen concentrations of <math><1\text{ ppb}</math> to 100 %
- Standardized signal output



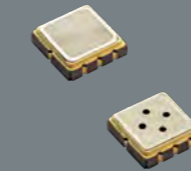
NDIR sensors & modules

- Sensors and modules for the measurement of CO₂, C_xH_y and other industrial gases
- Suitable for gas volume concentrations of <math><100\text{ ppm}</math> to 100 %



Electrochemical sensors & modules

- Sensors/sensor modules for oxygen and other industrial gases
- Industrial-standard 1, 4 and 7-series housings



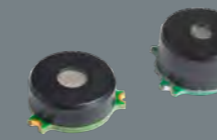
Pellistors & thermal conductivity sensors

- Sensors for flammable and industrial gases
- Sensors based on MEMS and on conventional technology



MOS sensors & modules

- VOC, air quality and industrial gas sensors
- Sensors based on thin film technology
- Standardized signal output



Certified sensors (ATEX, UL, CSA, etc.)

- Pellistors and thermal conductivity sensors
- NDIR sensors



Humidity sensing

- Humidity sensing at high temperatures of up to 350 °C
- Industrial humidity transmitters
- Sensor chip, ASIC and digital SMD sensors for 0 – 100 % RH





Vibration & shock sensors

- Cost-effective
- Frequency range of up to 17 kHz
- Certified in accordance with AECQ200



Inclinometers & accelerometers

- 1, 2 and 3-axis and multiple degrees of freedom
- Low noise $<10 \mu\text{g} / \text{SQRT}(\text{Hz})$
- Temperature range of $-40\text{ }^\circ\text{C}$ to $+125\text{ }^\circ\text{C}$ ($+150\text{ }^\circ\text{C}$)



Rate sensors

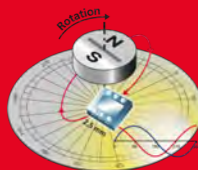
- Rate sensor $\pm 25\text{ }^\circ/\text{s}$ up to $2,700\text{ }^\circ/\text{s}$
- Outstanding bias stability of $0.12\text{ }^\circ/\text{h}$
- 1 to 9 axes

Inertial systems and software

- Software library for static or dynamic systems
- Open development platform
- Development support by partners

Magnetic sensors

- Programmable sensors
- Linear, angular and switch sensors
- Temperature range of $-40\text{ }^\circ\text{C}$ to $+150\text{ }^\circ\text{C}$



Rotary encoders

- Single and multi-turn encoders
- Magnetic and optical versions
- Available as a kit and module



Angle & displacement sensors

- Potentiometers
- Contactless, magnetoresistive
- Available with single and dual output



Cable-actuated position

- Measurement range of up to 20 m
- Analog, digital or bus output
- Cost-effective and heavy-duty

Geometric sensors



Ultrasound, interfaces and temperature



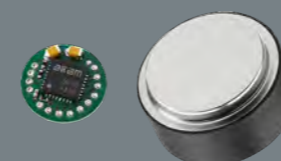
Ultrasonic flow sensors

- Cost-effective design
- Gases and aqueous liquids
- Suitable for gas, water and heat meters



Modular high-temperature flow measurement systems

- Aqueous liquids and oil
- Max. operating temperature of 180 °C (optionally, 200 °C)
- Modular system
- OEM-specific versions available



Ultrasonic flow transducers

- Gases and liquids
- Flow and distance measurement
- Various housing materials
- Design-In support



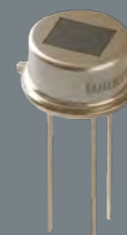
Ultrasonic fill level measurement

- Contactless measurement from outside through the wall
- OEM-specific design
- Simple calibration



Temperature sensors

- Various digital and analog sensor types available
- High accuracy, high sensitivity and low power consumption
- SMD, wired and customer-specific connections



Infrared sensors

- Outstanding signal/noise ratio and high stability against ambient temperature changes
- Excellent immunity to electromagnetic interference (RED standard)

Current sensors



AC current transformer

- 0.1 – 50,000 A rated current, bandwidth of up to 5 kHz and accuracy of up to 0.1 %
- Intrusive and non-intrusive, PCB version, DIN rail, screw version
- Conductor feedthrough, bus bar, split core, clamp type, cable-tied

DC and AC Hall current sensors

- 0.001 – 6,000 A rated current, bandwidth of up to 300 kHz and accuracy of up to 0.1 %
- Intrusive and non-intrusive, PCB version, DIN rail, screw version
- Conductor feedthrough, bus bar, split core, clamp type, cable-tied

DC and AC multiparameter sensors

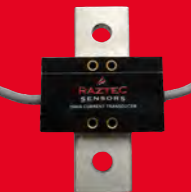
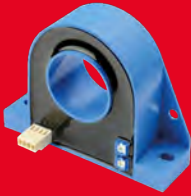
- Measuring range of up to 3,000 A, current, voltage, power, 1 to 3 phases
- Digital outputs RS232, RS485, Modbus
- DIN-rail-mounted

Hall effect current probe

- AC, DC, pulsed or mixed currents of up to 10,000 A, bandwidth of up to 350 kHz
- Compact size, non-intrusive, isolated sensor type
- Hybrid technology, installation in bus bar

Voltage sensors

- AC and DC voltage sensors for up to 1,000 V
- Accuracy up to Class 0.2
- DIN-rail-mounted

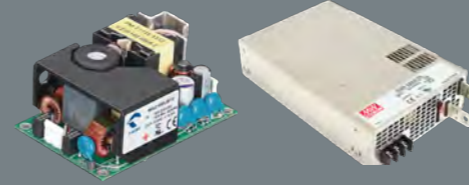


Power supplies



AC/DC power supplies

- 1 – 30,000 W, up to 14 outputs, high efficiency, digital control
- Open frame or enclosed, DIN-rail, 19" rack, modular, PCB modules, IP68-protected
- Battery chargers
- Desktop and wall plug adapters



DC/DC converters

- 0.25 – 1,000 W, high efficiency
- PCB modules and brick formats, open frame, chassis, DIN rail
- Isolated and non-isolated, regulated and non-regulated



LED drivers

- AC/DC indoor and outdoor 8 – 1,000 W
- DC/DC driver with up to 45 W
- Dimmable DALI, KNX, PWM, analog or resistance, timer dimming



Medical power supplies

- 1 – 1,200 W, up to 12 outputs, medical approvals and certifications
- Open frame, enclosed, encapsulated, DIN rail, modular, PCB modules
- Desktop and wall plug adapters



DIN-rail back-up, redundancy and protection

- AC/DC and DC UPS and battery charger controller
- up to 2,400 W
- Supercapacitor, redundancy modules, overcurrent protector, motor soft start and brake controller
- Individually configurable parameters via software



DC/AC inverters

- 75 – 3,000 W
- True or modified sine wave
- Solar inverter





DC vibration motors

- Diameter 4 – 22 mm
- Voltage 1.6 – 24 VDC



DC-Motors

- With or without brush
- Diameter 8 – 90 mm
- Modular system, voltage range of 6 – 96 VDC



Servo motors & servo drives

- Motion control
- Up to 10 KW with multi-axis motion control
- Highly dynamic, efficient and accurate



Direct drives

- High accuracy >134 million counts per revolution
- High torque of 4.5 to 510 Nm



AC motors

- Power 0.25 – 315 kW
- High efficiency IE3 and IE4
- Gears and frequency inverters available

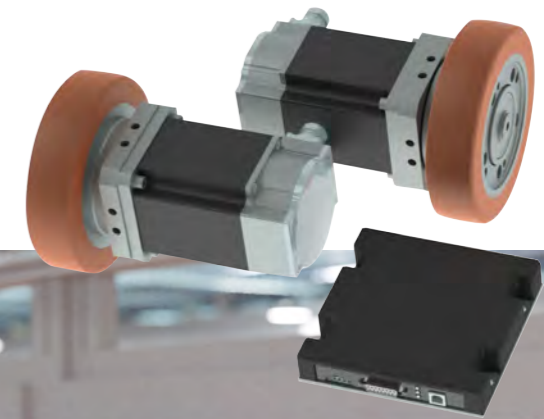


Linear drives

- Force 100 N to 100 kN
- Voltage 12 – 48 VDC, 230 – 400 VAC
- Stroke 50 – 1,000 mm



Drives



E-components



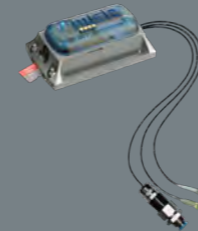
Silicon carbide (SiC) Schottky diodes & FETs

- Universal gate driver
- Minimal RDS (on)
- Minimal QRR (Reverse Recovery Charge)



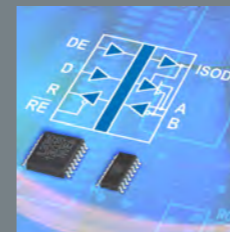
Joystick

- Hall effect, resistive and switch joysticks
- High-precision single, double and triple-axis models
- Configurable buttons and switches
- Models for panel installation or desktop operation
- Industrial thumb joysticks with button, protection class up to IP67
- Industrial trackballs, T-bar faders and paddle controllers
- Analog and digital output
- For industrial applications, cabin cars and security



Data loggers

- Shock and vibration data loggers
- for long-term measurement
- Mini data loggers for temperature, humidity, pressure, light and acceleration/altitude – internal & external sensors
- Multifunctional data logger with four analog inputs



Isolated interface modules

- RS-422/485, SPI, CAN, Profibus and gate drivers
- Wide body with up to 10 kV isolation voltage, high CMTI values up to 300 V/ns
- New products approved in accordance with VDE0884-11 and recognized by UL1577

Competitive sensor & power solutions worldwide



AP **Angst+Pfister**
Sensors and Power

Headquarter Switzerland:

Angst+Pfister
Sensors and Power AG
Thurgauerstrasse 66
CH-8050 Zurich
Phone +41 44 877 35 00
sensorsandpower@angst-pfister.com
sensorsandpower.angst-pfister.com

Office Germany:

Angst+Pfister
Sensors and Power Deutschland GmbH
Edisonstrasse 16
D-85716 Unterschleissheim
Phone +49 89 374 288 87 00
sensorsandpower.de@angst-pfister.com



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