# Simply a question of better measurement



### **SCHMIDT® PC Programming Kit**

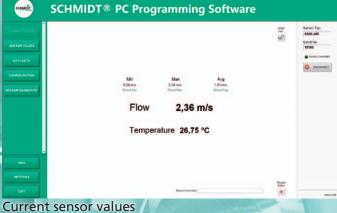
## Sensor configuration and data recording

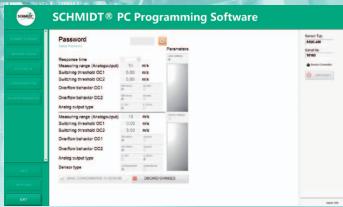


**SCHMIDT® PC Programming Software** 

Sensor values as a graph

- Sensor programming and parameterisation
- Display and short-term recording of flow velocity (w<sub>N</sub>) or mass flow (v<sub>N</sub>) and medium temperature (T<sub>M</sub>)
- Temporary display of measured values on PC
- Modbus (RTU) activation and interface configuration
- For all compatible SCHMIDT® flow sensors with module interface
- Plug-and-play





Sensor programming and parameterisation



#### Programming and parameterisation of sensors

With the SCHMIDT® PC Programming Kit, SCHMIDT® flow sensors and mass flow sensors can be individually programmed for specific applications. Depending on the sensor type, different parameters are available, such as:

- Response time / damping (4 levels: none / low / medium / high)
- Scaling of analogue outputs (start / end values for  $w_N$  /  $\dot{v}_N$  and  $T_M$ )
- Pulse output value
- Units of measurement (flow / mass flow / temperature)
- Switching outputs / switching polarity
- Definition of current / voltage output
- Programming Modbus (RTU)

The **parameter "Damping"** is used to filter a measurement signal that may be too unstable by forming a moving average so that the output is smoother.

The parameters "Analogue output scaling" | "Start value" and "End value" allow the range of an analogue output to be scaled in order to optimally adapt its display range to the actual measuring range of an application.

The parameter "Pulse value" determines the measured volume (quantity) after which one pulse is sent by the pulse output.

With SCHMIDT® Cleanroom Sensors such as the SS 20.400, further cleanroom-specific sensor configurations can be customised via the parameters "switching output", "switching polarity" and "specification of current / voltage output".

**SCHMIDT®** Sensors with integrated **Modbus module** can be enabled via the PC Programming Kit and the interface can then be configured.

#### Display and recording of sensor measurement data

The SCHMIDT® PC Programming Kit is also used to display sensor measurement data in real time. You can choose between displaying the data as decimal numbers or as a graph. In addition, short measurement sets can be recorded using the recording function (data logger function). The recording files are saved in CSV file format and can be further processed using standard spreadsheet programmes.

The SCHMIDT® PC Programming Kit is supplied with a PC programming cable (USB), an USB stick with the SCHMIDT® PC Programming Software and instructions for use in German and English.

## Parameterisation of SCHMIDT® cleanroom sensors with interface splitter

To use the SCHMIDT® PC Programming Kit with SCHMIDT® Cleanroom Sensors, additional accessories in the form of an interface splitter set are required. New purchase of flow sensor / sensor to be configured on site (installed):

**SCHMIDT**® Flow Sensor SS 20.4xx or SS 20.715 + 5-pin cable + **SCHMIDT**® Interface Splitter (568400-1) + PC Programming Kit (564710)

Flow sensor is to be programmed on the PC (removed at the work-station):

**SCHMIDT**® Flow Sensor SS 20.4xx or SS 20.715 + **SCHMIDT**® Interface Splitter with plug-in power supply (568400-2) + PC Programming Kit (564710)

Note: This configuration is also used for stand-alone operation of the sensor in conjunction with a **SCHMIDT**® Module (Data Logger DL 10.010, Measured Value Display MD 10.020, Bluetooth® Module BT 10.010).

The flow sensor is already present (7-pin connection) and should be programmed on site at a later date:

**SCHMIDT**® Flow Sensor SS 20.4xx or SS 20.715 + **SCHMIDT**® Interface Splitter with adapter M9/M12 (568400-3) + PC Programming Kit (564710)

Note: This configuration can also be used to retrofit a SCHMIDT® Module (Data Logger DL 10.010, Measured Value Display MD 10.020, Bluetooth® Module BT 10.010).

| Technical Data                         |                                                               |
|----------------------------------------|---------------------------------------------------------------|
| PC requirements                        |                                                               |
| Operating system                       | Windows 7 and higher                                          |
| User interface                         | SCHMIDT® PC Programming Software                              |
| Programming cable (PC Programming Kit) |                                                               |
| Electrical connection - Sensor: - PC:  | Flange connector M12, male, 4-pole, A-coded USB, type A (2.0) |
| Length of cable                        | 1,5 m                                                         |
| Operating temperature                  | 0 +60 °C                                                      |
| Storage temperature                    | -25 +80 °C                                                    |
| Humidity                               | < 95 % rH                                                     |
| Protection type                        | IP65                                                          |
| Protection class                       | III (PELV)                                                    |
| Sensor                                 |                                                               |
| Model                                  | SCHMIDT® Sensor with integrated module interface              |
| Operation                              | Operating voltage connected                                   |
| General information                    |                                                               |
| Article-No.                            | 564710                                                        |
| SCHMIDT® PC Programming<br>Software    |                                                               |