

# ColorPlus

The Plus in colour and concentration measurement



## Applications

- Colour and absorption measurement in liquids and gases
- Concentration measurement of substances based on characteristic wavelengths
- Calibration in E, E/m, APHA-Hazen, ASTM, Saybolt, ICUMSA etc.

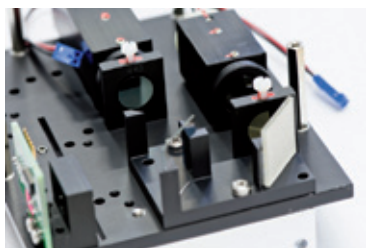
## Industries

- Chemical/pharmaceutical industries
- Galvanic industry
- Sugar industry
- Pulp/paper industry
- Water treatment

## Advantages

- Multiple device configurations
- Numerous application-specific flow cells
- Turbidity compensation using an additional light source (optional)
- Fast and simple verification with checking unit
- Control unit with colour touch screen display
- Smooth system integration using various communication interfaces

### Innovations with tangible benefits



#### Multiple device configurations

A large number of light sources are available from UV 254 nm to VIS 760 nm. Thus, the ColorPlus can be exactly tailored to your needs.

Up to 3 light sources can be installed in the instrument. This allows:

- Several parameters to be measured simultaneously.
- Impact of turbidity to be compensated.
- The true colour to be measured.



#### Customer-specific flow cells / little and simple maintenance

The flow cells can be adapted precisely to your application:

- Inline or bypass flow cells.
  - PVDF flow cells for corrosive chemicals.
  - Varivent® connections in all common diameters.
  - Flow cells with heating jacket.
  - Sliding measuring cells.
- These allow:
- Simple cleaning or recalibration.



#### Checking unit

For inspecting the instrument, checking units on the basis of reference filters can easily be inserted:

- A checking unit is included in the basic configuration and allows the checking of high absorption.
- Further checking units are available for checking various measuring points.



#### Intelligent control system

Control unit SICON with state-of-the-art touch screen technology and colour display:

- The display selectively shows values, graphs, or status and alarm messages.
- An internal data logger allows displaying the measured values from the last 32 days.



#### Life cycle costs

This instrument was designed with a focus on longevity and little maintenance:

- The maintenance is simple and can be carried out by the customer.
- Highest reliability.

### Technical data

#### Device:

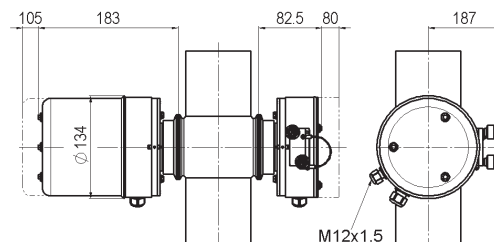
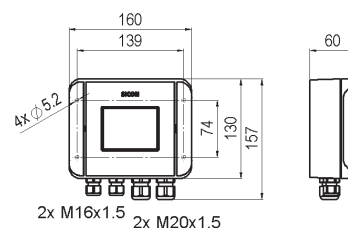
Measuring principle:	Absorption
Wave length UV lamp:	254, 313, 365, 436, 546 nm
Wave length LED:	365 .. 760 nm
Measuring span:	0 .. 3 E 0 .. 60 E/m 0.001 E
Resolution:	0.001 E
Measuring range:	8, freely configurable
Units:	E, E/m, Hazen, ASTM, Saybolt, ICUMSA etc.
Ambient temperature:	-20 .. +50 °C
Material housing:	Stainless steel 1.4301
Degree of protection:	IP65
Weight:	4.3 Kg

#### Flow cell:

Material:	Stainless steel 1.4404, 1.4435, PVDF, PVC
Window material:	Borosilicate (VIS), quartz (UV), sapphire
Sealing:	EPDM, NBR, FPM, FFPM
Sample temperature:	Depending on flow cell material, max. of +110 °C
Sample pressure:	600 kPa (6 bar)
Sample quantity:	Depending on flow cell and application
Connections:	Depending on flow cell

#### Control unit SICON:

Power supply:	VIS 9 .. 30 VDC / UV 22 .. 24 VDC
Power input max.:	8 W
Display:	1/4 VGA, 3.5"
Operation:	Touch screen
Ambient temperature:	-10 .. +50 °C
Ambient humidity:	0 .. 100 % rel. F.
Protection class:	IP66
Output:	4 x 0/4 .. 20 mA, galv. separated, 7 x digital
Input:	5 x digital, can be configured independently
Digital interfaces:	Ethernet, microSD-card, Modbus TCP
Optional modules (max. 2):	Profibus DP, Modbus RTU, HART 4 x 0/4 .. 20 mA output, galv. separated 4 x 0/4 .. 20 mA input



Your representative:



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