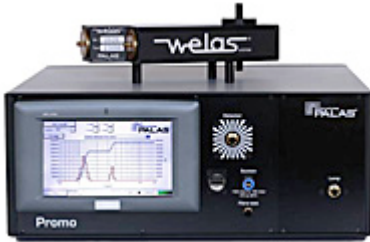


Process Monitor: Light Scattering Spectrometer

With Built in Real Time Display



- Largest measurement range from 0.2 μm to 105 μm (up to 4 measurement ranges available in one device)
- Calibration curves for various refraction indices
- Greatest concentration range from $< 1 \text{ P/cm}^3$ up to 106 P/cm^3
- Extremely high and repeatable counting efficiency starting at 0.2 μm
- Pressure-resistant up to 10 bar (optional)
- Can be heated to 250 $^{\circ}\text{C}$ (optional)
- Fiber-optic technology
- User-friendly operation with large touch display and integrated webserver
- Calibration, cleaning and lamp replacement can all be performed independently by the customer
- Low maintenance
- Reduces your operating expenses

Promo is a light-scattering spectrometer for particle size analysis and concentration determination that can be equipped with all **welas**[®] sensors .

Using fiber-optic cables, **welas**[®] sensors – equipped with measurement volumes of different sizes – can be easily attached to the **Promo** and **Promo 3000** and exchanged at will. These sensors make possible a reliable measurement in the concentration range from $< 1 \text{ P/cm}^3$ up to 106 P/cm^3 . The sensors are available for measurements in gases as well as in liquids. Please refer to the datasheet “**welas**[®] sensors”.

A touch display ensures user-friendly operation. Measurements can be started easily, and all data, such as the current number distribution and the number concentration, as well as 24 further statistical values, can be evaluated and displayed in real time.

Promo can be operated as a stand-alone measurement device (i.e. without external pc) for continuous measurement. All incoming data can be stored with a max. temporal resolution of 1 second. **Promo** can thus autonomously measure for weeks and store the generated data. For data transfer, **Promo** can also be integrated into a company network. Optionally, a printer can be connected as data recorder.

Promo has a standard interface and can be controlled by a process control system or by a simple Labview program. **Promo** is therefore particularly suitable for control and monitoring applications.

Specifications

Measurement range: 0,2 μm - 105 μm , $C_n \leq 10^6 \text{ P/cm}^3$

$-90^{\circ}\text{C} \leq T < 70^{\circ}\text{C}$

Optional: $T \leq 250^{\circ}\text{C}$, $p \leq 10 \text{ bar}$

Exhaust flowrate: 5l/min

Digital individual signal acquisition: 20 MHz processor,

256 raw data channels

Light source: 35 W Xenarc lamp

Operating terminal: Touchdisplay 800 x 480 Pixel, 1,6 GHz Intel Atom[™] processor, 2 GB Compact flash

Interfaces: USB, Ethernet, RS232/485

Electric connection: 115V/230, 50/60 HZ

Case: Desktop case (19" compatible 4HE, 84 TE, T= 435 mm), optional with mounting brackets for rack installation