# Precise and Highly Variable Digital Measuring Device PHYSICS 300

Complex digital measuring device with data logger function for precise measurements in meteorology, water analystics, chemistry, biotechnology, industry, research and development etc.

## **Measurement units PHYSICS 300**

mbar, Pa, lux, °C, °F, Hz, kJ/kg, %H, ppm, mA, V, min, W/m², mS, bar, g/Kg, m/s, pH

With PHYSICS 300 a wide variety of measurement tasks and functions is achievable e.g. temperature (Pt100, thermocouples, NTC, infrared), air humidity, air flow, pressure, power, flow rate, electrical values etc. Up to 3 channels or 3 measuring points can be covered simultaneously and subject to type of probe 4 internal per function channels can be processed.

Technical data PHYSICS 300		
Measuring input:	3 input channels for some 65 measuring units	
Galvanic isolation:	Semiconductor relais (50 V)	
Kanäle:	4 channels/plugs for dual probes and function channels, 4 internal channels (e.g. balance/channel)	
AD converter:	Delta-Sigma 16 bit, 2,5 or 10 M/s	
Probe voltage:	Battery: 9 V, max. 150 mA, Mains adapter: 12 V, max. 150 mA	
Output:	2 output channels for analog, data, trigger, relay cable, memory modules etc.)	
Display graphic:	128 x 64 pixel, 8 lines	
Display illumination:	2 LEDs, white	
Keyboard:	7 silicone keys	
Internal memory:	59 kB EEPROM (12000 values)	
Batteries:	3 Mignon Alkaline	
Mains adapter:	230 V (AC) to 12 V (DC), 200 mA, (galvanically isolated)	
DC adapter cable:	10-30 V, 0,25 A (galvanically isolated)	
Casing:	ABS (max. 70 °C), light grey	
Dimensions and weight:	L 127 x W 83 x H 42 mm, 290 g	
Ref-No.:	59234	

### Additional order no.:

....../03 with works certificate (for the measuring unit temperature) ....../04 with DKD certificate (for the measuring unit temperature)



## **Technical features**

- Compact shape and ergonomic design
- 3 galvanically separated input channels, various measuring units
- Intelligent probe display with probe specific functions
- Resolution options 0,01 or 0,1
- Measuring functions: measuring value, zero-setting, set-point adjustment
- 2-step adjustment, scaling (optional: multi-point calibration for temperature values)
- Functions: max./min. value documentation
- Average value by time, single values or Meauring points
- Measuring menue free programmable (numeric or graph display)
- Interfaces: USB, RS232, Ethernet, analog
- Memory (various data logger functions programmable) Internal: EEPROM memory for up to 12000 values (as linear or ring memory configurable)
   External: memory plug with MM card connectable
- Sleep mode for long-term documentations
- Language selection: German, English, French
- DKD calibration certificate available (for the measuring unit temperature)



# Accessories for digital measuring device PHYSICS 300

Beside the accessories shown on this page we offer a wide program of probes for the digital measuring device PHYSICS 300 (see our separate data sheets)

Please refer to these data sheets by indication of your measuring task eg. temperature, air humidity, air flow, pressure, power, flow rate, electrical values etc.

Available accessories	RefNo.
Mains adapter 230 V, 200 mA	57090
Mains adapter 115 V, 300 mA (US)	58802
USB cable (galvanically isolated, max. 115.2 kB))	57091
RS232 cable (galvanically isolated, max. 115.2 kB)	55855
Ethernet cable (galvanically isolated, max. 115.2 kB)	57512
Bluetooth adapter plug, class 2	58321
Memory plug with MM card for further measuring values	57733
Software PHYSICS view	58306



## Case for digital mesuring device and accessories

Stable hard protective case with foam inserts (without content) **Ref.-No.: 57844** 



## Holster for digital mesuring device

Stable protective cover (grey) with combi-bracket for standing/hanging

Ref.-No.: 58804



# Ludwig Schneider GmbH & Co. KG

Postfach 15 61 · 97865 Wertheim Am Eichamt 4 · 97877 Wertheim

Tel.: +49-9342-8560-0 · Fax: +49-9342-84671

e-Mail: info@ludwig-schneider.de www.ludwig-schneider.com