

# 9 Appendix

In this section you will find the most important technical data of the pH meter, dialog structures, a list of standard accessories and optional accessories as well as warranty and declarations of conformity.

## 9.1 Technical data

Provided that nothing to the contrary is mentioned, the published values represent the typical data of the **826 pH mobile** and the **827 pH lab**.

### 9.1.1 Measuring modes

<i>Measuring mode</i>	<i>Prim. measured quantity</i>	<i>Sec. measured quantity</i>
<b>pH</b>	pH	T
<b>Temperature</b>	T	
<b>Potential</b>	U	

### 9.1.2 Measuring inputs

#### Potentiometric

for pH value, potential

- 1 high-impedance measuring input for pH, redox and ISE electrodes
- 1 reference input for separate reference electrode

*Input resistance* >  $1 \cdot 10^{12}$  Ohm (under reference conditions)

#### Temperature

Also for automatic temperature compensation

- 1 measuring input for temperature sensors (Pt1000 or NTC)

NTC characteristics configurable

*Default values* R (25°C) = 30'000 Ohm /  $B_{25/50} = 4100$

#### Measuring interval

*Measuring cycle* 1 s for all measuring modes

### 9.1.3 Measuring input specifications

	Measuring range	Resolution	Measuring accuracy <sup>1)</sup>
<i>pH</i>	-8.000 ... +22.000	0.001 pH	± 0.003 pH
<i>Temperature</i>			
<i>Pt1000</i>	-150 °C ... +250 °C	0.1 °C	± 0.2 °C (-20 °C ... +150 °C)
<i>NTC (30 kΩ)</i>	-5 °C ... +250 °C	0.1 °C	± 0.6 °C (+10 °C ... +40 °C)
<i>Potential</i>	-1200.0 mV ... +1200.0 mV	0.1 mV	± 0.2 mV

<sup>1)</sup> ±1 digit, without sensor error, under reference conditions

### 9.1.4 Measured values memory

*Memory capacity* 200 measured values, nonvolatile storage

### 9.1.5 Display

*Display* LC display b/w, 128 x 64 pixel, 65 mm x 35 mm

### 9.1.6 Interfaces

#### Infrared interface

*IR* Sending reports to a IrDA compatible printer

### 9.1.7 Power supply

#### 826 pH mobile

*4 batteries* 1.2 ... 1.5 V, type LR6, AA, AM3 or mignon  
*Battery life* approx. 2 years (in operation for 1 hour/day with connected NTC temperature sensor and IR interface switched off, with alkaline batteries)

#### 827 pH lab

*Power supply unit* 6 V, 0.1A  
*2 batteries* 1.2 ... 1.5 V, type LR6, AA, AM3 or mignon for the clock

### 9.1.8 Housing specifications

*826 pH mobile* IP 66/67 (with connected splash-proof electrode plug I)

### 9.1.9 Safety specifications

*Instrument 826/827* Standards fulfilled:  
 - EN/IEC/UL 61010-1  
 - CSA-C22.2 No. 61010-1  
 - Protection class III

### 9.1.10 Electromagnetic compatibility (EMC)

<i>Emission</i>	Standards fulfilled: - EN/IEC 61326 - EN 55022 / CISPR 22
<i>Immunity</i>	Standards fulfilled: - EN/IEC 61326 - EN/IEC 61000-4-2 - EN/IEC 61000-4-3 - EN/IEC 61000-4-4 (only 827) - EN/IEC 61000-4-5 (only 827) - EN/IEC 61000-4-6 (only 827) - EN/IEC 61000-4-11 (only 827) - EN/IEC 61000-4-14 (only 827)

### 9.1.11 Ambient temperature

<i>Nominal working range</i>	-10 °C...+55 °C (max. 85 % rel. humidity)
<i>Storage</i>	-20 °C...+60 °C (≤ 65 % rel. humidity)
<i>Transport</i>	-40 °C...+60 °C

### 9.1.12 Reference conditions

<i>Ambient temperature</i>	+25 °C (±3 °C)
<i>Rel. humidity</i>	≤ 60%
<i>Validity of data</i>	After adjustment

### 9.1.13 Dimensions

#### 826 pH mobile

<i>Housing material</i>	Polycarbonate / Acrylonitrile-butadiene-styrene (PC/ABS)
<i>Keyboard material</i>	Silicon rubber
<i>Display cover material</i>	Polymethyl methacrylate (PMMA)
<i>Width</i>	98 mm
<i>Height</i>	37 mm
<i>Depth</i>	183 mm
<i>Weight (without stand)</i>	370 g

#### 827 pH lab

<i>Housing material</i>	Polycarbonate / Acrylonitrile-butadiene-styrene (PC/ABS)
<i>Keyboard material</i>	Silicon rubber
<i>Display cover material</i>	Polymethyl methacrylate (PMMA)
<i>Width</i>	210 mm
<i>Height</i>	45 mm
<i>Depth</i>	183 mm
<i>Weight (without stand)</i>	900 g