

## Technical data

ProSens



| Line                     | ProSens 100  |  | ProSens 200  |  | ProSens 400   |   | ProSens 600     |   |
|--------------------------|--|--|--|--|---|---|-----------------|---|
| Model                    | QM-100   | QM-211   | QM-212   | QM-213   | QM-421 / QM-422   | QM-612  | QM-621 / QM-622 |   |
| Power supply             | 24V DC (31 + 30V DC), power consumption: 2.5 W max.  |  |  |  |   |   |                 |   |
| Display                  | none or graphic LCD, 128 x 64 pixels, with backlight   |  |  |  |   |   |                 |   |
| Type of probe            | none   | radial integrated, length 40 mm, $\varnothing$ 18 mm, stainless steel 316L, PTFE filter cap  | radial integrated, length 90 mm, $\varnothing$ 18 mm, stainless steel 316L, PTFE filter cap  | radial integrated, length 145 mm, $\varnothing$ 18 mm, stainless steel 316L, PTFE filter cap   | axial integrated, L=200 or 300 mm, $\varnothing$ 12 mm, stainless steel 316L probe and filter cap   | cable probe L=80 mm, $\varnothing$ 18 mm, stainless steel 316L, PTFE filter cap   |                 | cable probe L=200 or 300 mm, $\varnothing$ 12 mm, stainless steel 316L probe and filter cap                 |
| Probe parameters         | none   | <b>temp.</b> : measuring range -30 + 80°C, typ. err. $\pm$ 0.5°C @ -10 + 80°C<br><b>temp. &amp; humidity</b> : measuring range -30 + 80°C, typ. err. $\pm$ 0.2°C @ 30 + 60°C ( $\pm$ 0.4°C @ -30°C, $\pm$ 0.7°C @ 120°C); 0 + 100% RH; typ. err. $\pm$ 1.8% RH (20 + 80% @ 25°C) | <b>temp.</b> : measuring range -30 + 105°C, typ. err. $\pm$ 0.5°C @ -10 + 85°C<br><b>temp. &amp; humidity</b> : measuring range -30 + 105°C; typ. err. $\pm$ 0.2°C @ 30 + 60°C ( $\pm$ 0.4°C @ -30°C, $\pm$ 0.7°C @ 120°C); 0 + 100% RH; typ. err. $\pm$ 1.8% RH (20 + 80% @ 25°C) | <b>temp.</b> : measuring range -50 + 120°C, typ. err. $\pm$ 0.5°C @ -10 + 85°C<br><b>temp. &amp; humidity</b> : measuring range -40 + 120°C; typ. err. $\pm$ 0.2°C @ 30 + 60°C ( $\pm$ 0.4°C @ -30°C, $\pm$ 0.7°C @ 120°C); 0 + 100% RH; typ. err. $\pm$ 1.8% RH (20 + 80% @ 25°C) | <b>temp.</b> : measuring range -50 + 120°C; typ. err. $\pm$ 0.5°C @ -10 + 80°C<br><b>temp. &amp; humidity</b> : temp. measuring range -40 + 120°C; typ. err. $\pm$ 0.2°C @ 30 + 60°C ( $\pm$ 0.4°C @ -30°C, $\pm$ 0.7°C @ 120°C); humidity measuring range 0 + 100% RH; typ. err. $\pm$ 1.8% RH (20 + 80% @ 25°C) |   |                 |   |
| Connector & cable type   | none   |  |  |  |   | glend or 4 pin M12 connector; cable, PUR or TPU covered (operating temp. -30 + +80°C) or TFE covered (operating temp. -30 + +120°C) |                 | glend, cable 3m max., PUR covered, operating temp. -30 + +80°C or TFE covered, operating temp. -30 + +120°C |
| Number of inputs         | 1 or 2 universal   |  | 0 or 1 universal   |  |   |   |                 |   |
| Type of universal inputs | <b>current</b> : 0/4-20 mA, <b>voltage</b> : 0/1-5 V, 0/3-10V, 0-60 mV, 0-75 mV, 0-300 mV, 0-350 mV; <b>RTD</b> : Pt100, Pt500, Pt1000, measuring range: -100°C + 600°C; <b>thermocouple</b> : type K, S, J, T, N, R, B, E; measuring ranges: -200°C + +120°C (K); -50°C + +1768°C (S); -210°C + +1200°C (J); -200°C + +400°C (T); -200°C + +1300°C (N); -50°C + +1768°C (R); -250°C + +3000°C (E)<br><b>accuracy</b> : 0.1% @25°C a one digit (inputs: current, voltage, millivoltage, thermoresistance, thermocouple K, J, E); 0.2% @ 25°C (thermocouple N); 0.5% @ 25°C (thermocouple S, T, R, E) |  |  |  |   |   |                 |   |
| Binary outputs           | 0, 1 or 2 electronic NO relays, 24V AC/20V DC, max. 200 mA   |  |  |  |   |   |                 |   |
| Analogous outputs        | 0, 1 or 2:<br><b>active current</b> : operating range 0/4-20 mA (0-24 mA max.); <b>passive current</b> : isolated, operating range 4-20 mA (2-24 mA max.); <b>active voltage</b> : operating range 0/1-5V, 0/3-10V (0-11V max.)  |  |  |  |   |   |                 |   |
| Communication interface  | RS-485, BML and BMD, 1200 bit/s + 115200 bit/s, Modbus RTU, not galvanically isolated  |  |  |  |   |   |                 |   |
| Operating temperature    | -30°C + +80°C, case with electronics (out of range -30 + +70°C LCD and IR receiver turn off)   |  |  |  |   |   |                 |   |
| Protection class         | IP 67 (version without display); IP 65 (version with display)  |  |  |  |   |   |                 |   |
| Case                     | wall mounted, 120 x 96 x 50 mm, material: ASA UL94V0 + polycarbonate   |  |  |  |   |   |                 |   |

## Data presentation



No display version,  
LED signaling



One measurement  
display mode



Two measurements  
display mode



Four measurements  
display mode



Menu display mode



Device status information