

INDUSTRIAL PROCESS INSTRUMENTATION

Supmea SUP-PH6.5 pH or ORP Controller

Panel-mount online controller • 1/4 DIN • 110 VAC

The SUP-PH6.5 is a rugged industrial controller for continuous **pH** or **ORP** monitoring and control. Select the mode you need in the on-board menu, connect the matching electrode, and it delivers accurate real-time readings with dual relay control, an isolated 4-20 mA output, and RS485 (Modbus RTU) communication.

It integrates cleanly into PLC, SCADA, or standalone control panels and holds up in chemical plants, water and wastewater treatment, metal finishing, and agricultural fertigation. A compact 1/4 DIN body drops into a standard 92.5 mm panel cutout.

**READ FIRST Measures pH or ORP — one parameter at a time.**

The SUP-PH6.5 has a single measurement input. You set it to **pH mode** or **ORP mode** and connect the matching electrode. It reads one parameter at a time and does **not** measure pH and ORP simultaneously. If you need both monitored at once, use two units, one configured for each. A compatible pH or ORP electrode is required and sold separately.

Key Features

- **Selectable pH or ORP** — menu-configurable, one parameter at a time
- **High accuracy** — ± 0.02 pH / ± 1 to 2 mV
- **Dual relay control** — 2 SPDT relays, AC 250V / 3A
- **Compact 1/4 DIN** — 96 x 96 mm face, 92.5 mm cutout
- **Wide ranges** — 0 to 14 pH, or -2000 to +2000 mV in ORP mode
- **Auto temp compensation** — NTC10K, Pt1000, or Pt100
- **Multiple outputs** — isolated 4-20 mA + RS485 Modbus RTU
- **Simple operation** — 2.8" backlit LCD, menu-driven setup

Specifications

Measured parameters	pH or ORP (selectable, one at a time)
pH range / accuracy	0.00 to 14.00 pH / ± 0.02 pH
ORP range / accuracy	-2000 to +2000 mV / ± 1 to 2 mV
Input resistance	$\geq 10^{12} \Omega$
Temperature compensation	NTC10K / Pt1000 / Pt100, -10 to 130 °C, manual or automatic
Analog output	4-20 mA, isolated, max loop 750 Ω , $\pm 0.2\%$ FS
Digital communication	RS485, isolated, Modbus RTU
Relay outputs	2 channels SPDT, AC 250V / 3A
Display	2.8" monochrome LCD, 128 x 64, backlit
Power supply	110 VAC ($\pm 10\%$)
Panel format	96 x 96 mm (1/4 DIN); cutout 92.5 x 92.5 mm; depth 150 mm
Ingress protection	IP5X (front)
Weight	0.58 kg (1.3 lb)
Operating temperature	0 to 60 °C

Applications

- **Fertigation systems (pH mode)** — hold ideal pH for nutrient absorption; prevent scaling and clogging in drip lines.
- **Dyeing wastewater (ORP mode)** — monitor ORP for efficient color removal and chemical dosing.
- **Metal surface treatment (pH or ORP mode)** — hold chemistry for plating and anodizing; fewer defects, less overdosing.
- **Exhaust gas scrubbers (pH mode)** — keep scrubbing liquid at correct pH to meet emission limits.
- **Strong acid & alkali processes (pH mode)** — precise pH control for safety and product consistency.
- **Sewage treatment (pH or ORP mode)** — continuous control to protect biological treatment and improve effluent quality.

Electrode required (sold separately). The SUP-PH6.5 is the controller only. It needs a compatible pH or ORP electrode matched to the mode you select. Contact us and we will recommend the right electrode for your application.

Why Choose Prime USA Scales?

Right Product, First Time

We match the controller and electrode to your process so you order once and it works.

In-Stock & Fast Shipping

Shipped from our Las Vegas warehouse with free shipping on this unit.

Real Support

Talk to a person for setup, wiring, and calibration questions before and after the sale.