

# SIM

## Multifunction signal generator and simulator

It provides an analogue control signal with a single device and can simulate the main control signals of sensors and transducers.



**SIM** is a **compact, professional** signal generator designed to simulate the main **analogue control signals** used in HVAC&R, **automation** and **regulation**. With a **single device**, it allows testing and configuration of systems that use standard signals such as **0-5 V, 0-10 V, 0-20 mA, 4-20 mA, NTC (10 k $\Omega$ )** and **PTC**.

Thanks to the **precision multi-turn potentiometer (10 turns)** and the **6-position selector switch**, the operator can generate the required signal **accurately** and **immediately**.

**SIM** can be easily connected to a **digital multimeter** for direct reading of the generated value and is powered directly from the **+24 Vdc** output of the connected controller.

### Main functions:

- **Quick signal selection** via **6-position selector switch**
- **Fine adjustment** via **multi-turn potentiometer**
- **Simplified connection** with **3-pole removable terminal block**
- **Status LED** for immediate **power check**
- **Integrated terminals** for **direct measurement** with a **multimeter**

## Features

### Multi-signal

Simulator



A single device allows testing and configuration of systems using standard signals such as 0–5 V, 0–12 V, 0–25 mA, 4–20 mA, NTC (10 kΩ) and PTC.

0-5 Vdc

0-12 Vdc

0-25 mA

4-20 mA

NTC

PTC

### Multi-turn

Fine adjustment



The 10-turn multi-turn potentiometer enables fine and accurate signal adjustment from 0 to 100%. Ideal for calibration, testing and simulation in HVAC applications where maximum stability is required.

### Direct power supply

From controller



Designed to be powered directly from the controller's +24 Vdc line, always available on Selpro devices.

This configuration simplifies and ensures immediate commissioning, eliminating the need for external power supplies or additional wiring.

### Multimeter terminals

For direct measurement



Equipped with dedicated (+) and (–) terminals for direct connection of a multimeter, enabling real-time reading of the generated signal.

This function allows accurate verification of the output value in voltage or current, making the device an ideal tool for quick on-site testing and calibration.

## Technical data

Power supply	24 Vdc (± 10%) - max 40 mA
Output signal	Analogue: 1 configurable output, 3-pole flying female connector, 5 mm pitch
Protection rating	IP50
Enclosure material	Polycarbonate
Operating temperature	From 0 °C to 50 °C
Storage temperature	From 0 °C to 65 °C
Humidity	0% to 85% non-condensing relative humidity
Vibration	≤ 1g (9,8m/s <sup>2</sup> )