

Zentro Sense

Reader module for eight temperature sensors

Zentro Sense is an expansion module that reads temperature data from up to eight 1-Wire sensors. Unlike an ordinary 1-Wire bus where every sensor shares a single channel, this module gives each sensor its own channel — so a fault or damaged wiring on one sensor does not disable the rest. The module connects to the controller over Modbus RTU on RS-485 and mounts on a DIN rail.



Part number ZN-SENSE-001

HIGHLIGHTS

Total I/O points	8 sensor channels
RS-485 channels	1
Protocols	Modbus RTU
Supply voltage	5 – 24 V DC (SELV)
Dimensions (W × H × D)	72 × 91 × 22 mm
Mounting	35 mm DIN rail (EN 50022)

TYPICAL APPLICATIONS

1. Which sensors can be connected?

Digital 1-Wire temperature sensors only, including the probe, pipe-contact, immersion and outdoor variants. Humidity sensors are not supported by this module.

2. Can more than one sensor share a channel?

No. Connecting more than one marks the whole channel invalid. For the same reason a 1-Wire hub cannot be used.

3. How do I know a reading is valid?

Register 9 holds eight validity bits, one per channel. If a sensor is disconnected the last value remains in the register and the validity bit clears. The channel indicator shows the same state.

PRODUCT FAMILY

Zentro Core M-014	ZN-COREM-001
Zentro Core L-028	ZN-COREL-001
Zentro Link	ZN-LINK-001
Zentro Sense ←	ZN-SENSE-001
Zentro Expand	ZN-EXPAND-001



Full detail and documents on the website — zentro-tech.com · Document number ZT-DS-SENSE-001-EN