

Zentro Sense

Installation Guide

Part number ZN-SENSE-001 · Document number ZT-IG-SENSE-001-EN

SAFETY

WARNING

Disconnect the supply before any wiring work. Working on a live circuit risks personal injury and irreversible damage to the unit.

CAUTION

A line terminator fitted at more than two points will load the line and degrade communication.

NOTE

Add external protection to every inductive load — an RC circuit, a varistor or a diode.

MECHANICAL INSTALLATION

Mounting	35 mm DIN rail (EN 50022)
Mounting orientation	Vertical
Operating temperature	–25 ... +75 °C
Humidity	10 – 95 %, non-condensing
Ingress protection	IP 20

Installation sequence

1. Attach the DIN rail holder to the rear of the module with screws.
2. Set the communication parameters on the DIP switches before installation.
3. Clip the module onto the DIN rail in the vertical position.
4. Connect earthing using a tooth washer and screw.
5. Connect the temperature sensors to the RJ45 connectors — one sensor per channel only.
6. Connect the RS-485 line to the green pluggable terminal.
7. Connect the supply to the orange pluggable terminal.
8. After changing the DIP switch settings, disconnect and reconnect the supply to apply them.

Removal from the DIN rail

Disconnect the supply and every field cable, release the DIN rail clip with a flat screwdriver, pull the bottom of the unit outwards and lift it off the rail.

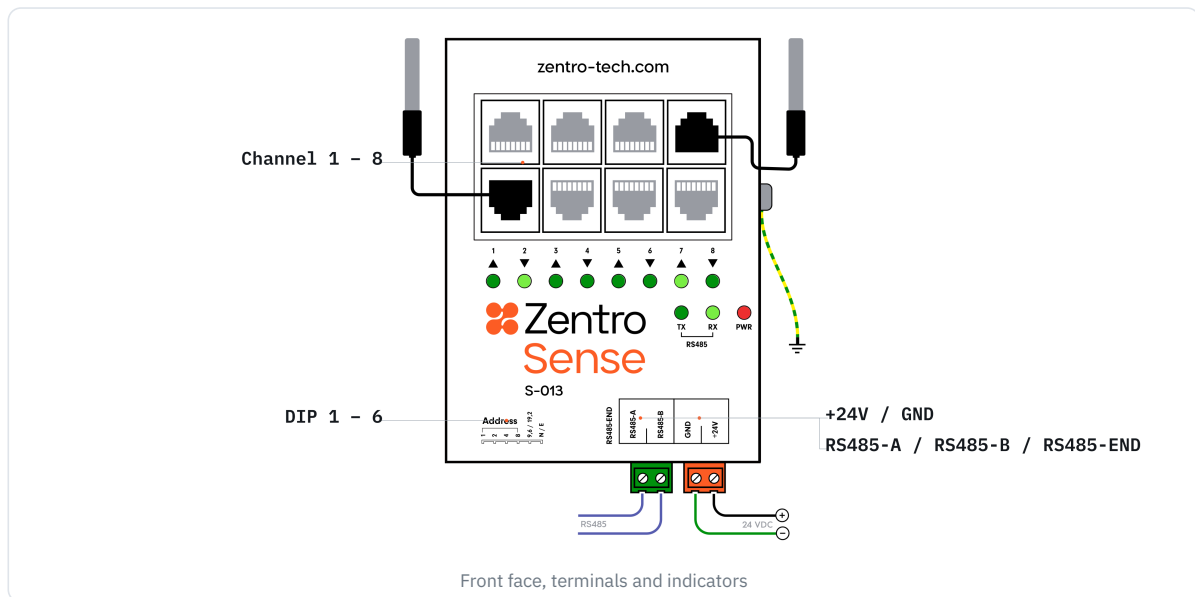
CONNECTING THE SUPPLY

Supply voltage	5 – 24 V DC (SELV)
Maximum power consumption	0.2 W
Reverse polarity protection	Yes
Conductor cross-section	Up to 2.5 mm ² for supply and RS-485
Earthing	Screw earthing terminal — connect using a tooth washer and screw

CONNECTING THE RS-485 LINE

RS-485 channels	1
RS-485 galvanic isolation	None
Line terminator	Built-in, attachable, 120 Ω , via the RS485-END switch
1-Wire	8 independent channels · one sensor per channel · parasitic mode · shielded RJ45 connector · up to 50 m per channel
Modbus defaults	Address 15 · 19 200 bps · 8 bits · no parity · 2 s sampling interval
Hardware configuration	6 DIP switches — address 1–15, 9 600 or 19 200 bps, parity

TERMINALS AND CONNECTORS



Channel 1 - 8	RJ45 connectors for temperature sensors, one sensor per channel
RS485-A / RS485-B / RS485-END	Modbus RTU serial line
+24V / GND	Supply, 5 – 24 V DC
Earth terminal	Earthing via tooth washer and screw
DIP 1 - 6	Modbus address, bit rate and parity