Temperature & Humidity Sensor

TL-THS-01 · Wireless ambient monitoring

Know your sensor

Read temperature and relative humidity on the local LCD. Connect through your Thermalog gateway for remote monitoring. Gateway and monitoring service are separate from the sensor hardware.

Use the magnetic back or lanyard hole for mounting. Keep sensing openings unobstructed. Install at 2 m or lower and below 2,000 m altitude.

Specifications

Temperature	−20 °C to 60 °C
Humidity	0–100% RH
Specified accuracy	±0.2 °C; ±2% RH
Screen	2.2-inch LCD, °C / °F
Wireless	Zigbee 3.0 (IEEE 802.15.4)
Battery / input	CR2477 coin cell, 3 V, non-rechargeable
Dimensions / weight	62.8 × 58.5 × 21.8 mm / 65.6 g
Housing	White PC+ABS; IP65 splash protection

Cold-temperature limitation: Near −20 °C, deviation may reach ±0.7 °C. Battery capacity can fall and the LCD may show ghosting. Battery capacity may not fully recover after warming.

IP65 limits: Do not immerse, pressure-wash or expose to direct rain. This is an ambient sensor, not a core-temperature probe.

Set up and use

Pair with Thermalog

1. Start device pairing on your Thermalog gateway. Keep the sensor near the gateway for initial setup.
2. Turn the rear battery cover with a coin. Remove the insulation tab from the pre-installed battery.
3. First power-on enters pairing automatically. The signal icon flashes slowly. If needed, use a suitable pin to hold the button under the cover for 5 seconds. This also restores factory settings.
4. Complete pairing within 3 minutes. A steady signal icon indicates success. If pairing times out, repeat the 5-second button hold.
5. Secure the battery cover. Name the device for its location and verify both readings in your Thermalog system before relying on remote monitoring. Contact support if either measurement is missing.

Buttons and signal icon

Double-press the button to switch between °C and °F. A single press checks communication at the intended location: a steady signal icon indicates a connection to the Zigbee network. A slow flash indicates pairing; an unlit icon following pairing indicates failure.

Choose the monitoring location

Mount securely using the magnetic back, or hang from the lanyard hole. Check communication after moving the sensor. Walls, metal enclosures and distance can reduce wireless coverage; reposition the gateway or add a Thermalog Range Extender if needed.

Keep away from direct heat, direct rain and high-pressure cleaning. Allow conditions to stabilise after placement. The LCD and remote readings can differ briefly because of transmission and reporting delays.

For pairing help: info@thermalog.com.au or +61 414 256 103. Gateway controls and reporting behaviour depend on your Thermalog configuration.

Battery safety and care

Coin battery warning

Keep new and used batteries away from children. Swallowing a coin battery can cause severe internal burns within 2 hours and can be fatal. Seek immediate medical attention if a battery may have been swallowed or inserted into any part of the body. Do not wait for symptoms.

If the battery compartment cannot be secured, stop using the sensor, remove the battery and keep both away from children. Used batteries remain dangerous.

Replace the battery

Open the rear cover with a coin. Replace the cell with one non-rechargeable 3 V CR2477, following the polarity markings. Refit and fully secure the cover. Confirm the display and remote readings resume before returning the sensor to service.

Do not recharge, short-circuit, force-discharge, dismantle, cut or crush the battery. Do not burn it or heat it above 60 °C. Avoid extreme heat and very low air pressure. Remove the battery during extended storage and recycle it through an appropriate local battery collection service.

Troubleshooting

No display: Check the insulation tab has been removed, battery polarity is correct and the battery has charge.
Pairing fails: Move closer to the gateway, restart its pairing process and hold the sensor button for 5 seconds. Allow up to 3 minutes.
Offline readings: Check gateway connectivity, sensor battery and wireless coverage.
LCD ghosting in the cold: Allow the sensor to warm within its operating range and check the battery. See the low-temperature limitations on page 1.

Care and support

Keep the sensing openings clear. Protect the device from immersion and pressure cleaning; keep the rear cover secure. For unresolved faults or warranty support, contact Thermalog. Hardware warranty: 2 years. This guide covers the Thermalog-branded sensor and its basic operation; it does not replace product markings or supplied safety notices.