ETHS is a wireless temperature & humidity sensor for EnOcean systems. Powered by a solar cell, it works absolutely maintenance-free. An integrated energy store allows operation for several days in total darkness. In dark surroundings, a coin cell battery can be retrofitted.

ETHS periodically measures temperature and humidity of its environment. Significant changes in readings are reported immediately. In addition, frequent updates (signs-of-life) are provided at regular intervals. The small housing can easily be mounted to walls or furniture using the included adhesive pad. Using the included metal stand the sensor can be positioned on horizontal surfaces. One end cap can be replaced by the enclosed triangle cap.

Primary power supply: Indoor light (solar, incandescent, fluorescent, LED), 50-100000 lx
Backup power supply: Optional battery (CR1225, not included)
Radio standard / frequency / transmission power:
- EnOcean / 868.30 MHz / 5 dBm (ETHSA)
- EnOcean / 902.875 MHz / 99 dBµV/m (ETHSU)
Antenna / transmission range: Helix / up to 300 m free field, up to 30 m indoor
EnOcean Equipment Profile (EEP): VAES 128, CMAC, RLC counter
Supported security algorithms: VAES 128, CMAC, RLC counter
Temperature sensor performance:
- Measurement range -20..+60°C, Resolution 0.1K
- Accuracy ±0.5K across entire range
Humidity sensor performance:
- Measurement range 0-100% rh, Resolution 0.4% rh,
- Accuracy ±4.5% rh across entire range, ±3% rh between 20%...80% rh
Measurement cycle time: Once every 100s
Immediate transmission threshold: Change by >±0.5 K or >±3% rh versus last transmission
Sign-of-life transmission: Measurement data update once every 11-24 minutes (random)
Charge time before linking: Typ. <5 min @ 400 lx
Sustain condition for battery free operation: min. 1200 lxh per day (25°C)
Operation time in darkness: Typ. 4 days
Teach-in telegram trigger and indicator: Pushbutton and LED
Dimensions of housing (without stand, 2 square caps): 76 x 22 x 15 mm
Dimensions of housing adhesive: 50 x 18 x 0.8 mm
Dimensions of stand: 30 mm x 30 mm x 1.2 mm (without slide-flap)
Housing, color and material: White, similar to RAL 9010, PC/ABS
Operating conditions: -20...+60 °C, 0...93% r.h., non-condensing, IP 40, indoor use only
Storage conditions: Recommended: +10...30 °C, <60% r.h., max. 36 months
Approvals: CE/RED (ETHSA), FCC/ISED (ETHSU)
Single unit pack (sensor unit, stand, adhesive, t. cap, instructions): Card box 32 x 32 x 99 mm
Minimum order quantity / shipping box: 50 units / card box 232 x 176 x 174 mm, 2.09 kg

Note 1: Charge time at 25°C from empty energy store until a teach-in telegram can be sent
Note 2: Operation time from a fully charged energy store if telegrams are sent on average every 17.5 minutes (signs-of-life)
Note 3: To keep performance, recharge energy storage after 36 months in total darkness

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