



Tap-radio®  
Air quality+temperature+humidity  
sensor TF-LGTF

Temperature at mounting location:  
-20°C up to +50°C.  
Storage temperature: -25°C up to +70°C.  
Relative humidity:  
annual average value <75%.

**valid for devices from production week  
08/20** (see bottom side of housing)

Wireless air quality+temperature +humidity  
sensor, pure white, glossy, for separate  
installation 84x84x17/33 mm or installation  
in the E-Design switching system. With  
LED display to signal room air quality.  
With additional alert tone. Power supply  
230V. Stand-by loss only 0.6 watt. Smart  
Home sensor.

The sensor measures all total volatile  
organic compounds (TVOC) in the air,  
temperature from -20°C to +60°C and  
humidity from 0 to 100%.

Every change in TVOC value or a change  
of 5% in humidity or a change in tem-  
perature by 0.6° is signalled by wireless  
telegram to the Eltako wireless network  
within 30 seconds. If there is no change,  
a status telegram is sent every 10 minutes.

**Installation** in a 55 mm switch box:  
Screw on the mounting plate. Snap on  
the frame and plug in the front panel  
including the electronics. 230V power  
supply wired to the terminals at the rear.

We recommend stainless steel counter-  
sunk head screws 2.9x25 mm, DIN  
7982 C for screw connections. Either  
with rawl plugs 5x25 mm or on 55 mm  
switch boxes. Set of 2 stainless steel  
countersunk head screws 2.9x25 mm  
and 2 rawl plugs 5x25 mm is enclosed.

After switching on the power supply,  
5 beeps sound and the LED first lights  
up green. After a few minutes, the LED  
colour changes depending on the room  
air quality:

The LED **shines green** up to 400ppb

(< 1mg/m³) = **good room air quality**.  
The LED **shines yellow** from 400ppb to  
1300ppb = **medium room air quality**.  
**We advise occasional airing**.  
The LED **flashes red** as of 1300ppb  
(> 10mg/m³). Every 3 minutes, a **5-fold  
alert tone sounds** = **poor room air  
quality. Prolonged airing required**.

After switching on the power supply,  
teach-in telegrams with two different IDs  
are sent, one for the TVOC sensor followed  
by one for the temperature/humidity  
sensor.

The LED indicates that a telegram is  
sent by flashing once.

The actual temperature is only measured  
approx. 30 minutes after the power sup-  
ply is switched on while the electronics  
undergo temperature compensation.

**Self-calibration:**

Please note that the TVOC sensor was  
designed for applications where rooms  
are left unoccupied periodically for  
several hours a day so that room con-  
centrations can drop to typical outside  
levels. When a TVOC sensor is installed,  
the first 2 days in service are used for  
self-calibration to the ambient environ-  
ment.

**Switch off alert tone:**

1. Extract the front panel and electronics  
to the front out of the frame.
2. Plug the jumper onto one pin on the  
electronics.
3. Plug in the front panel and the  
electronics.

**Wireless telegrams:**

TVOC data telegram acc. to EEP:  
A5-09-0C  
Data\_byte3 + Data\_byte2 = 0 to  
65535ppb equivalent to 0x00 to 0xFF  
Data\_byte1 = -  
Data\_byte0 = 0x0A  
Teach-in telegram: 0x24600D80  
Temperature/humidity data telegram  
acc. to EEP: A5-04-02  
Data\_byte3 = -  
Data\_byte2 = relative humidity 0 to  
100% equivalent to 0x00 to 0xFA

Data\_byte1 = actual temperature -20°C  
to +60°C equivalent to 0x00 to 0xFA  
Data\_byte0 = 0x0F  
Teach-in telegram: 0x10100D87

**EnOcean wireless**

Frequency	868,3MHz
Transmit power	max. 10mW

**Hereby, Eltako GmbH declares that the  
radio equipment type TF-LGTF is in  
compliance with Directive 2014/53/EU.  
The full text of the EU declaration of  
conformity is available at the following  
internet address: [eltako.com](http://eltako.com)**

**Must be kept for later use!**

**Eltako GmbH**

D-70736 Fellbach  
**Technical Support English:**  
☎ Michael Thünte +49 176 13582514  
✉ [thuente@eltako.de](mailto:thuente@eltako.de)  
☎ Marc Peter +49 173 3180368  
✉ [marc.peter@eltako.de](mailto:marc.peter@eltako.de)  
[eltako.com](http://eltako.com)