

Tap-radio® outdoor brightness twilight sensor



TF-AHDSB

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 47/17** (see bottom side of housing)

Wireless outdoor brightness twilight sensor with solar cell, battery (lifetime 3-5 years) and antenna rod, 60x46x30mm plus antenna 85mm. Smart Home sensor.

The electronic requires no intrinsic power supply, so there is no standby loss.

The tap-radio® outdoor brightness twilight sensor is powered by a solar module and a button cell CR2032 and covers the range from 0 to 30.000 Lux. From approx. 300 Lux, it transmits a wireless telegram to the Eltako wireless network every time there is a brightness change of more than approx. 500 Lux within approx. 10 seconds.

**Actuators FSB, FSR and FUD can cover the range from 0 to approx. 50 Lux using the twilight switch function. A wireless telegram is sent about every 100 seconds within this range.**

At consistent brightness every approx. 100 sec., a control wireless telegram will be sent.

The electronics is powered by an internal button cell CR2032 for several years. To change the cell, only remove the front panel. This is also necessary to activate battery supply by removing an insulation strip.

In delivery status only the 'FAH-Modus' is activated.

If 'TF-Modus' is switched on additionally, the sensor can be taught in as twilight-sensor in tap-radio actuators **TF61R, TF61L, TF61D, TF-TA65L, TF-TA55L,**

**TF-TA65D, TF-TA55D, TF100L and TF100D.** When the stored threshold value (0 to approx. 50 lux) is subtracted, the sensor emits an 'ON Telegramm' 3 times within 10 seconds'. If the brightness value of approx. 500 lux is reached, an 'OFF telegram' is sent 3 times within 10 seconds.

The permissible ambient temperature is -20°C to + 55°C.

When mounted with an antenna rod downwards, the protection class IP54 is achieved.

Assembly by screwing or gluing. An adhesive foil is included as well as a set of screws and dowels.

Shading elements must not cover brightness sensors. Keep the solar cell cover clean.

**Teach in the sensor as 'FAH' to the FSB, FSR, FUD actuators and GFVS:** Hold the enclosed magnet briefly (<2 s) at the designated position ■.

An FAH learning telegram is sent. The switching threshold is set on the actuator, as described in the respective operating instructions.

**Activate 'TF mode' and teach in the sensor into the tap radio actuators TF61R, TF61L, TF61D, TF-TA65L, TF-TA55L, TF-TA65D, TF-TA55D, TF100L and TF100D:** Hold the enclosed magnet for 3 seconds at the designated place ■.

A TF teach in telegram is sent and the current brightness is stored as a threshold value in the sensor. The teach in mode of the actuator is automatically terminated and disabled.

The threshold value in the sensor can be changed afterwards by holding the enclosed magnet at the designated place ■ for 3 seconds.

**Activate the teach in mode of a tap-radio actuator with TF-AHDSB and restore the delivery state:** Hold the enclosed magnet for 15 seconds at the designated location ■.

**FAH-Modus:**  
Teach-in telegram: 0x18080D80  
Data telegram to EEP: A5-06-01  
Data\_byte3 = brightness 0-100 lux, linear n = 0x00-0x64 (only valid if DB2 = 0x00)  
Data\_byte2 = brightness 300-30.000 lux, linear n = 0x00-0xFF  
Data\_byte1 = -  
Data\_byte0 = 0x09

**TF-Modus:**  
Teach-in telegram: 0xE0400D80  
Data telegram to EEP: A5-38-08  
Data\_byte3 = 0x01  
Data\_byte0 = 0x08 = OFF  
0x09 = ON  
0x28 = Unlocking

**The crossed-out waste container indicates that batteries may not be disposed with other household or commercial waste.**



**Attention: Danger of explosion if battery is replaced improperly. Only replace it by an equivalent type!**

**EnOcean wireless**

Frequency	868,3 MHz
Transmit power	max. 10 mW

**Hereby, Eltako GmbH declares that the radio equipment type TF-AHDSB 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!**

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