

Wireless Task Ambient Photo Sensor

TAP-17



energy conservation - home and office

Overview

Echoflex products are based on EnOcean wireless technology and include the features of other wireless control technologies like "peel and stick" installation of sensors, simple adaptation to a tenants changing needs, and reduced wiring costs.

With EnOcean technology, the radios require very little power allowing ambient energy sources to power the sensors eliminating the maintenance burden of replacing batteries and disposing of them. The push of a light switch or the light within an office is all that's needed to energize the sensor and broadcast the signal.

Echoflex's TAP-17 uses photo-sensors hidden behind a unique opaque lens to monitor the interior light level and transmit the value to any of Echoflex's lighting controllers. The controller determines whether to turn the associated dimming ballast up or down or switch the circuit according to configured lighting set points.

The same photo-sensors are used to absorb energy from the surrounding environment creating enough power to operate the TAP-17.

The TAP-17 is a key component in Echoflex's Smart Space daylight harvesting applications that assist facility operators in controlling energy costs. For more information on this application, please visit www.echoflexsolutions.com.



Features

- ⇒ Battery-free wireless light level sensing
- ⇒ Provides accurate feedback to day-light harvesting controllers
- ⇒ No mounting hardware needed → maximum space flexibility
- ⇒ 100 feet interior transmission range
- ⇒ operates in low light conditions
- ⇒ selectable 0 - 510 lux and 0 - 1024 lux ranges
- ⇒ Available in both 315 and 868 MHZ EnOcean frequencies
- ⇒ Provides feedback on energy supply and storage

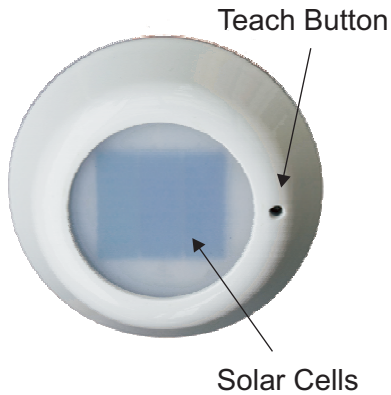
Ordering Information

Model Number	Description
TAP-17	Dual Range Photo Sensor, 868MHz radio
TAP-17C	Dual Range Photo Sensor, 315MHz radio

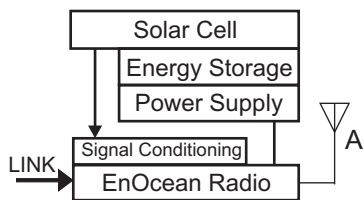


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Functional Diagram



Block Diagram



EnOcean Equipment Profiles

EEP: A5-06-02, Light Sensor
 DB_1: 0 lux - 1024 lux
 DB_2: 0 lux - 512 lux
 DB_3: Supply Voltage 0...5.1V, linear n=0...255

Technical Specifications

Power Supply	Dual Solar cell
Operational Light Level	40 lux minimum
Charging Period	6 hours full charge
Initial Operation	5 minutes in 40 lux
Full Charge Operation	8 hours in 0 lux
Telegram Heartbeat	Light Level Charge Timer (± 10%)
	< 50 lux (4.6 FC) 2.3 .. 3 V 120 seconds
	> 50 lux 3 V 30 sec.
	> 50 lux 3 .. 4.5V linear ramp to 10 sec.

Communications

Radio Type 315 MHZ or 868 MHZ EnOcean radio
 Antenna Integrated whip
 Transmission Range 30m (100 ft.) - commercial office space
 Inputs LINK button for assignment to receiver

Mechanical Specifications

Operating Temperature -13°F to 145°F (-25°C to 65°C)
 Relative Humidity 5% to 95% RH (non-condensing)
 Weight 2.6 oz. (74 gms.)
 Dimensions 4.0"round x 0.9" (100 mm x 23 mm)
 Mounting mount with screws or tape (Velcro®), not supplied

Agency Listing

Radio Frequency FCC Part 15.231 - XMGSTM112C
 IC 7256A-STM112C



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