TrickleStar®
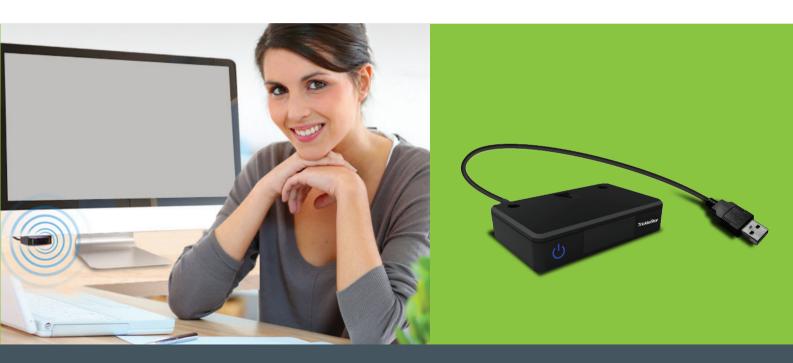
USB Motion **Sensor**™

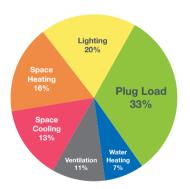Provides simple, plug-and-play energy savings for computer workstations
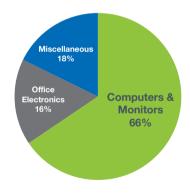
Saving energy has never been easier!

Computer Power Usage

The amount of energy consumed by computers and monitors in commercial buildings is significant. In full-power operation, a computer can use 80-100 Watts of power. In sleep mode, a computer only uses on average 3-5 Watts.

Lighting 20%

Space Heating 16%

Plug Load 33%

Space Cooling 13%

Ventilation 11%

Water Heating 7%

Plug load energy accounts for approximately one third of commercial building electricity consumption.

Data Source: DOE, 2010

Miscellaneous 18%

Office Electronics 16%

Computers & Monitors 66%

Computers and monitors account for 66 percent of all plug load energy use in commercial offices.

Data Source: Itron, Inc., 2006

Computer Sleep Mode

While monitors are often configured to sleep, unfortunately fewer than 10% of US-based computers are configured to take full advantage of these energy-saving features.

There are three major issues associated with computer energy consumption:

1. Most computers are left on for extended periods of time or permanently, even when they are inactive.

2. Users are unfamiliar with the power saving settings on their computer's operating system and/or do not implement them effectively.

3. Most people refrain from using the computer's energy-saving settings, which are often perceived as disruptive or intrusive to the user experience.

The USB Motion Sensor is simple to install and operate.

- Plugs into any computer USB port and requires no drivers, applications or operating system changes.

- When the user is away from their desk, it automatically puts the computer into sleep mode.

- It augments OS based energy settings or third-party energy management applications and allows for short countdown timer periods without being intrusive.

What is computer 'Sleep Mode'?

All computer actions stop when the computer enters sleep mode. Open applications and documents are saved in the computer's memory, so the user can return to their work without worrying about losing data. Sleep mode uses very little power and full-power operation quickly resumes within seconds of clicking the mouse or pressing any key on the keyboard.

Features and benefits

Saves Energy & Reduces Operating Costs

We can be lazy and often forget to switch off equipment that consume energy. The USB Motion Sensor automatically puts the computer to sleep when it is not needed.

Incredibly Simple & Easy to Install

Installing the sensor is incredibly easy and can be done in a matter of minutes. Simply plug it into any computer USB port, and it's up and running!

No Additional Software or Drivers Required

Best of all, the USB Motion Sensor requires no system drivers or additional software applications. It is truly a "plug-and-play" solution for saving energy.

No Operating System Changes or Setup

The USB Motion Sensor is compatible with PC (Windows®/Linux®) and Mac® (macOS®) operating systems. It requires no central setup or administration and does not interfere with any existing pre-installed power management software.

Maximum Savings, Minimal Intrusion

Computer users resist intrusive energy saving settings that result in the computer going to sleep too quickly. Using motion sensing as a proxy ensures that maximum savings can be achieved with minimal intrusion.
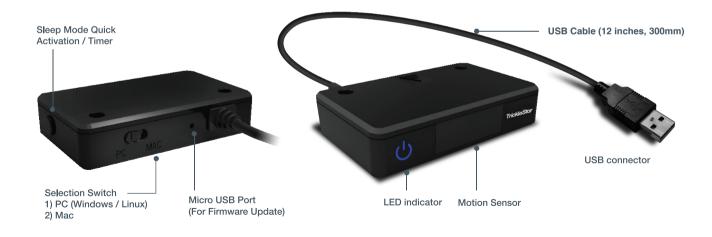
Low Energy, Passive Device

The USB Motion Sensor uses a passive infrared sensor and does not radiate any energy for detection purposes or contain a camera, ensuring it only uses a fraction of a Watt to run.

Inconspicuous design

The USB Motion Sensor is designed to inconspicuous and seamlessly blend into the workspace. Users will hardly notice that it's even there!

Sleep Mode Quick
Activation / Timer

Selection Switch
1) PC (Windows / Linux)
2) Mac

Micro USB Port
(For Firmware Update)

LED indicator   Motion Sensor

USB Cable (12 inches, 300mm)

USB connector

Inbuilt 'PIR'
(Passive Infrared) sensor

How it Works

A highly-accurate passive infrared sensor detects motion for a period of time (configurable to 5/10/15/20/25/30 minutes). When a person moves in the sensing area, for example by tapping the keyboard, the sensor detects a change in the received heat energy and the countdown timer is reset, keeping the PC in its active state. If no motion is detected during the set time period, a sleep command is sent to the computer putting it into sleep mode, thereby minimizing energy consumption.
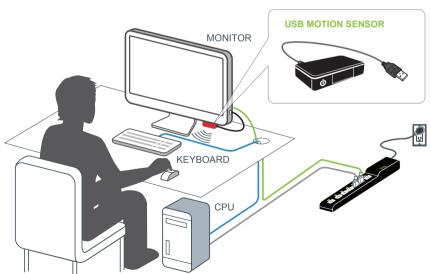
Mounting Bracket

The USB Motion Sensor comes with a special mounting bracket that connects to the sensor and mounts to the back of the monitor via an adhesive pad.

Application Diagram

USB MOTION SENSOR

MONITOR

KEYBOARD

CPU

Detailed specifications

Voltage:	5V DC (via USB connection)		**LED indicators:**	**Red:** device is powered on
Connection:	USB Type A male			**Blue:** device is connected and functional
Detection range:	6 ft.			**Flashing red/blue:** alerts user 60 seconds
Detection angle:	50°			prior to initiating sleep command
OS compatibility:	Windows®, Linux®, and Mac®			

			Dimensions:	**Length:** 1.4 inches
Device driver:	Not required			**Depth:** 1.1 inches
Device software:	Not required			**Height:** 0.5 inches
Power:	0.5 W			
Countdown timer:	5,10, 15, 20, 25, 30 minutes		**Quick Press Button:**	Initiates sleep command immediately
USB lead length:	12 inches (300 mm)		**Usage environment:**	Indoor use only (IP20)

ORDERING INFORMATION

TS1910   USB Motion Sensor™, 30cm cord

TS3006   USB Motion Sensor™ Bracket, Black

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