TrickleStar®



TS1816 TIER 2 BLUETOOTH® AV ADVANCED POWERSTRIP+

Smart surge protector for TV and home theater setups with automated energy savings and power monitoring

Product Overview

The Bluetooth AV Advanced PowerStrip+ (AV APS+) is a smart, energy-saving advanced powerstrip that reduces active and standby power loss with TV and home theater setups. Featuring a highly-accurate multi-sensor, the AV APS+ detects IR remote control activity and motion. If no Infrared (IR) remote control activity or motion is detected within the countdown period, the AV APS+ turns off the TV and other electronics plugged into the switched outlets.

Key Features

- 7 outlets: 5 switched (1 transformer-spaced, 2 always-on outlets)
- Resettable circuit breaker
- 1,080 Joules of surge protection at 500 VPR
- Auto-threshold detection with RMS power measurement
- Consumes <2 Watts at all times
- Power switching electromechanical relays rated for 100,000 switching cycles at a full 15-amp load
- Filters IR interference from non-AV equipment
- LED status indicators (ground, surge, switched)
- <40 dB EMI/RFI noise filtering
- 4 ft. heavy-duty cord with angled, space-saving plug
- Supports high-level Consumer Electronic Control (CEC) commands via optional TAV-Link™ cable (sold separately, allows connected devices to safely store their data prior to shutting down)

Connected Solution

The Bluetooth AV APS+ brings intelligence to home theater setups by transmitting valuable energy data to the TrickleStar mobile app and to the cloud-based TrickleStar Energy Portal™.

- The app (iOS and Android) allows users to manage and forecast their energy consumption and electrical costs, receive ground and surge status updates, complete product registration and sign up for special offers
- The TrickleStar Energy Portal provides program administrators and evaluators raw data for tracking, installation verification and statistical analysis
- Records one week of historical energy consumption data
- Complies with California AB 793 – Energy Management Technology

Premium Fireproof Surge Protection

Traditional surge protectors use standard Metal Oxide Varistors (MOVs). The AV APS+ incorporates ceramic-encased MOVs, which are capable of suppressing more energy and dissipating heat faster than traditional MOVs. This makes them fireproof during most surges.

The AV APS+ uses a high-quality, dedicated circuit breaker that is safer than combined circuit breaker switches found in other products. Multiple thermal-safety fuses (above the industry standard) safely shut down the AV APS+ in over-temperature conditions, and an FR-4 rated PCB means the AV APS+ has better temperature resistance and mechanical properties versus other products. These superior mechanical properties provide the highest degree of protection available.

Multi-Sensor

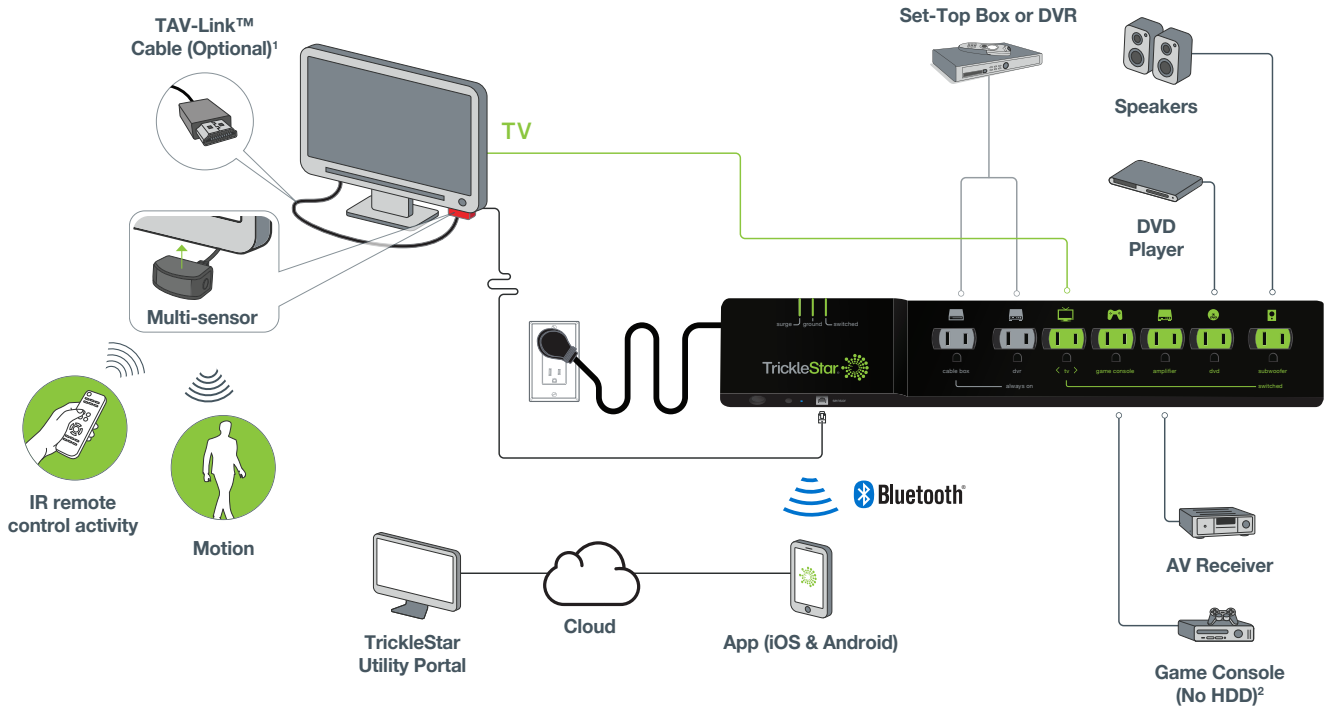
The multi-sensor features an intelligent algorithm that first looks for IR remote signals, and then looks for both IR remote signals and motion if no IR remote signals are detected. Additional features include the following:

- An LED light that flashes when IR remote activity or motion is detected
- LED flashes red/blue ten minutes and three minutes prior to shutdown
- A soft-chirp buzzer sounds ten minutes and three minutes prior to a shutdown
- A manual on/off button

TrickleStar®

BLUETOOTH® AV ADVANCED POWERSTRIP+

Application Diagram



[1] *TrickleStar TAV-Link functionality will softly switch off (place into an energy-saving mode) HDMI-connected peripherals capable of receiving Consumer Electronic Control (CEC) commands if no IR remote control activity or motion is detected.*

[2] *Game consoles without hard disk drives (HDDs) should be plugged into a switched outlet. Those with HDDs should be plugged into an always-on outlet and controlled via TAV-Link.*

Product Warranties

10-Year Lifetime Product Warranty
$100,000 Connected Equipment Warranty

AV APS+ Electrical Specifications

FOR INDOOR USE ONLY

Voltage	120 VAC +/- 10%, 60 Hz
Power Rating	15 A
Surge Protection	72,000 Amps/1,080 Joules
Noise Filtering	<40 dB
Standby Power Consumption	<1 Watt at all times unless communicating wirelessly
Power Consumption	<2 Watts while communicating wirelessly
Voltage Protection Rating	500 Volts L-N 500 Volts L-G 500 Volts N-G

Physical Specifications

Operating Temperature	32° to 113° F
Storage Temperature	14° to 140° F
Humidity	5 to 90% N/C
IP Rating	IP20

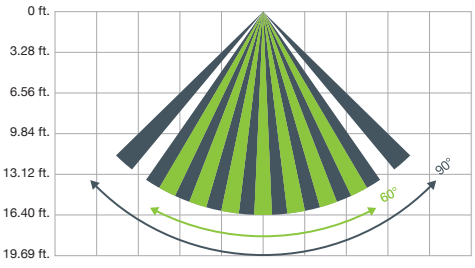
Multi-Sensor Electrical Specifications

FOR INDOOR USE ONLY

Voltage	3.3 V
IR Detection Range	Up to 16.4 ft.
IR Detection Angle	60°
Cord Length	IP20
Movement Detection Range	Up to 16.4 ft.
Movement Detection Angle	90°

PIR & IR Detection Pattern

SENSOR OPTICAL VIEW PATTERN

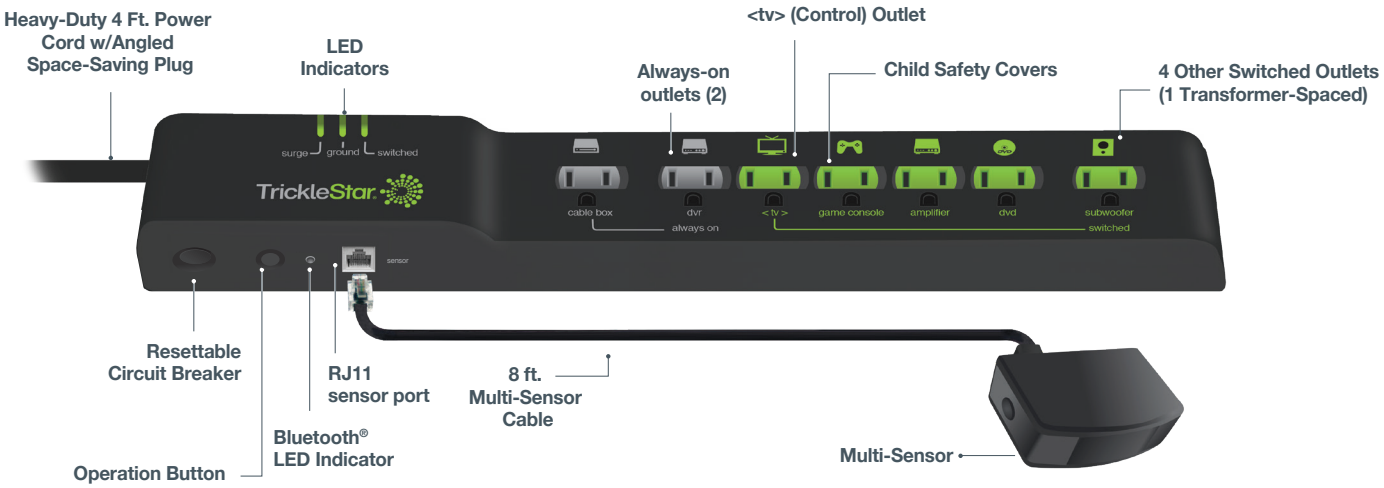


PIR Detection Range: 16.4 ft. Degree: 90°

IR Detection Range: 16.4 ft. Degree: 60°

BLUETOOTH® AV ADVANCED POWERSTRIP+

Feature Diagram



TrickleStar Mobile App



Download on the App Store

GET IT ON Google Play

Approvals

Relocatable Power Taps, UL 1363

Standard for Surge Protective Devices, UL 1449

Cord Reels and Multi-Outlet Assemblies, CSA C22.2 No. 308-18

Surge Protective Devices - Type 3 - Cord connected, direct plug-in and receptacle type, CSA C22.2 No. 269.3-17

Product Details

TS1816 7-Outlet Bluetooth® AV Advanced PowerStrip+

The Bluetooth® word mark and logos are registered trademarks owned by the Bluetooth SIG, Inc. and any use of such marks by TrickleStar Ltd is under license. Other trademarks and trade names are those of their respective owners.

Patents Pending & Patents
9,665,073 B2
7,193,335 B2

© 2020 TrickleStar Inc. All rights reserved.
TrickleStar® is a registered trademark of TrickleStar, Ltd. All other trademarks are the property of their respective owners. The information in this document is subject to change without notice. TrickleStar assumes no responsibility for any errors that may appear in this document.

REV 17 / 17 Aug 2020