

Smart AC socket: The future of Sustainable Charging

Elevate Your Charging Experience

Discover the pinnacle of charging technology with BrightZero® backed Smart AC socket. Designed for the discerning user, our innovative plug safeguards your chargers, devices and the environment.



BrightZero® Features

- **Precision charging:** Our patented chip-based technology ensures your device stops charging at 100%. No overcharging. Just perfection.
- **Universal compatibility:** From smartphones and e-bikes to gaming consoles and beyond, BrightZero adapts seamlessly to any charger and device, ensuring optimal charge every time.
- **Safety first:** Elevate your safety standards. With BrightZero, risks of overcharging associated mishaps are things of the past.
- **Sustainability champion:** Conserve energy, reduce waste, and champion a greener future. BrightZero Smart AC socket is not just a product; it's a movement towards sustainable living.

Join the Charging Revolution

Redefine what you expect from your chargers. Embrace safety, sustainability, and superior performance with BrightZero.

Benefits:



Elevated Battery Longevity

Harness the power of smart protection to prolong your battery's prime life, ensuring it reaches its full potential with each charge.



Safety Reinvented

Experience peace of mind. BrightZero's precision ensures charging ceases the moment it should, safeguarding both device and surroundings.



Enhanced User Experience

Relish in extended device uptime and amplified battery endurance, ensuring your devices not only last longer but also save you money.



Reduces waste

Champion a future with reduced e-waste. BrightZero ensures minimal energy consumption by eliminating unnecessary idle and maintenance power to devices and chargers.

Discover our patented AC Charging Control technology. Introducing Smart AC plugs & outlets designed for homes and offices, epitomizing simplicity, automation, convenience, and sustainability.

A Surge in Demand with BrightZero®

Integrating our BrightZero® feature promises unmatched demand. Envisioned as the top choice for mobile operators and electronic stores, it amplifies battery longevity and safety across devices and infrastructure.

Versatility and Proof of Excellence

Evidence of our innovation is in our adaptable prototype, derived from a market-available Sonoff smart plug. Designed to work with any charger, it caters to a wide array of devices, from handheld gadgets to e-vehicles and home utilities.

Intelligent Charging Control for a Safer Tomorrow

BrightZero® ensures optimal battery life, halting charging between 90-100%. This is the future, offering a smarter, safer, and sustainable charging experience, beyond the conventional 'dummy' outlets.

Opportunities and Collaboration

The technology is available for a license. BrightZero backed Smart Socket isn't just another product. It's an opportunity for visionary B2B manufacturers. Let's redefine the charging landscape together, making a lasting positive impact on our environment and consumer lives.



The BrightZero® Impact in USA: A Deeper Dive

1. Massive Household Savings

Background: With 6 rechargeable devices per average American household and **330 million people** in the U.S., there's potential to save on a grand scale.

Potential Annual Savings: Over **\$2.3 billion** for U.S. household. In energy, it means potential of 18,43 GWh savings annually, if using BrightZero saves approximately \$3 per device annually by preventing overcharging.

Carbon Footprint Reduction: The energy savings translates to a reduction equivalent to taking **689,130 cars** off the road.

2. Immense Mobile Phone Savings

Background: There are roughly **270 million smartphone users** in the U.S. The average user replaces their smartphone every 2.5 years, often because of battery degradation. With the assumed average price of a new smartphone around \$500, extending the battery life by just 6 months, we can defer the need for expensive replacements.

Impact: Extend the lifespan of 2 out of 3 mobile phones, leading to savings of over **\$30 billion** yearly for Americans.

3. Significant Energy Conservation

Background: BrightZero® feature reduces energy wastage from idle and maintenance consumption of devices and chargers.

Result: An annual energy savings potential of 18.43 GWh (18.43 billion kWh) in the USA — that's enough to power over **1.5 million U.S. homes** for a year. At an average electricity price of 12.5 cents/kWh, this equates to a savings of **\$2.3 billion** annually.

4. Environmental Impact

Background: Electronic waste: 141 pounds per American family annually (PIRG, 2021).

Calculations: Total e-waste generated by American families annually:
= 141 lbs/family × 128 million families = 18.048 billion lbs or **9.02 million tons**.

If using BrightZero technology can reduce device replacements by 20%:
= 20% of 9.02 million tons = **1.804 million tons** reduction in e-waste.

5. Safety Assurance: Preventing Costly Battery Fires

Background: Electrical malfunctions are among the leading causes of U.S. home fires. In 2020, there were 45,210 reported fires due to electrical causes, leading to 420 deaths, 1,370 injuries, and \$1.3 billion in property damage (source: U.S. Fire Administration).

Assumption: If we assume that 20% of these fires are caused by battery overcharge or overheating, that's roughly 9,042 fires.

Potential Savings: With BrightZero's ability to prevent overcharging, even a modest 10% prevention rate translates to 904 fewer fires. Considering the average damage per electrical fire is about \$28,760, that's a potential savings of \$25.9 million in damages annually.

BrightZero's Role: By halting charging at the optimal level, we minimize the risks of overheating and potential fires. Beyond energy conservation, we're striving for a safer home environment and significant financial savings.
