



# DOCKET

09-AAER-2

DATE	MAR 15 2011
RECD.	MAR 15 2011

March 15, 2011

Via USPS

California Energy Commission  
Dockets Office, MS-4  
RE: Docket No. 09-AAER-2  
1516 Ninth Street  
Sacramento, CA 95814-5512

Via Email

Mr. Harinder Singh  
California Energy Commission  
1516 Ninth Street  
Sacramento, CA 95814-5512  
hsingh@energy.state.ca.us

Dear Mr. Singh,

Power Products sells batteries and chargers for two-way radios to many businesses and public safety customers in California and throughout the United States. We recently became aware of the California Energy Commission's proposed rules for "appliance efficiency," which would negatively impact our products and customers.

In our view, the proposal is not realistic for multi-unit and multi-chemistry chargers or workable for charging nickel based batteries. These products are widely used by public safety customers in every state, including California. We request that low power consuming chargers such as the models we offer be excluded from the proposed rules. Information on our chargers is attached for your reference.

Thank you for considering this request.

Sincerely,

Chris Fuhrmann  
VP Marketing  
Power Products Unlimited, Inc.

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# ENDURA

TM

## Rapid Chargers

*For Rechargeable Two-Way  
Radio Batteries*

The Endura TWC1, TWC1M, and TWC6M are high quality models that will charge your radio's battery quickly and properly every time. Endura chargers are "smart" because they not only prevent over charging a battery, but also provide automatic re-charging of a battery when the radio remains "powered on" while in the charger. All models feature:

- **Advanced diagnostic circuitry and LED flash pattern that identifies battery fault conditions.**
- **Charge status LED that shows battery charging "in progress", "80% charged", or "fully charged".**
- **Replaceable charging pods that allow future use with different radios.**



**Model TWC1M:** Designed specifically for in-vehicle use, the TWC1M operates from a 12V or 24V power outlet. The charger comes complete with metal mounting bracket, vehicle power adapter, two tie-down straps, charging pod, user manual, and 12-month warranty.

**Model TWC6M:** The TWC6M is a multi-unit charger with a compact footprint and ideally suited for use in an office, shop, or mobile command center. The TWC6M includes an AC to DC power supply (UL listed), six charging pods, user manual, and 12-month warranty.



**Model TWC1:** The TWC1 single unit charger is ideal for desktop use. It includes an AC to DC power supply (UL listed), charging pod, user manual, and 12-month warranty.



Authorized Dealer:

 **PowerProducts**  
ENDURA Chargers By Power Products  
Smart • Adaptable • Reliable

## Charging Pods For Endura Rapid Chargers



Charging pods are available for a wide range of radios from Motorola, Kenwood, Harris, Vertex Standard, Icom, HYT, and other popular brands. All pods are designed to charge batteries with or without the radio and are interchangeable with TWC1, TWC1M, or TWC6M. For information on availability of pods for specific radios, contact an authorized Power Products dealer or visit [www.powerproducts.com](http://www.powerproducts.com).

## Endura TWC1M Accessories

The TWC1M includes a mounting bracket for securing the charger to a vertical surface, vehicle power adapter, and two tie-down straps. An optional accessory available for TWC1M is TWC1M-MBH, a mounting bracket for securing the charger to a horizontal surface.



Part Number: **TWC1M-MBH**

## Endura TWC6M Accessories

A sturdy metal mounting bracket, hard wire kit, and vehicle power adapter are optional accessories for the TWC6M. The mounting bracket allows the charger to be wall mounted in an office or vehicle and includes tie-down straps, fasteners, and installation instructions. With the heavy duty vehicle power adapter, the TWC6M may be powered from a vehicle's 12V or 24V outlet.



Part Number: **TWC6M-HW**  
(Also for use with TWC1M.)



Part Number: **TWC6M-MB**



Part Number: **TWC6M-VPA**  
(Also for use with TWC1M.)

## Specifications For Endura Rapid Chargers

	TWC1	TWC1M	TWC6M
Dimensions	115 x 136 x 86 mm 4.5 x 5.4 x 2.6 inches	116 x 98 x 106 mm 4.6 x 3.9 x 4.3 inches	510 x 172 x 80 mm 20.1 x 6.8 x 3.1 inches
Weight (with power supply)	275 g / 0.6 lbs.	320 g / 0.7 lbs.	3.1 kg / 6.2 lbs.
Compatible Battery Chemistries	NiCd / NiMH / Li-Ion / LiPo	NiCd / NiMH / Li-Ion / LiPo	NiCd / NiMH / Li-Ion / LiPo
Operating Temperature	15° C – 30° C	15° C – 30° C	15° C – 30° C
Storage Temperature	0° C – 65° C	0° C – 65° C	0° C – 65° C
Power Supply Type	AC to DC	DC to DC	AC to DC • DC to DC*
Power Supply Input	100V – 240V AC	12V-24V DC	100V-240V AC • 12V-24V DC*
Power Supply Output	15V DC	12V-24V DC	15V DC • 12V-24V DC*
Charge Rate	700 mA	700 mA	700 mA

\*With optional TWC6M-VPA or TWC6M-HW.

## Status LED Information

When a battery is placed in TWC1, TWC1M, or TWC6M, the charging status is indicated by the LED color and flash pattern.

- Solid ORANGE – Charger performing battery diagnostic.
- Solid RED – The battery is charging.
- Flashing RED – A fault condition exists. See user manual for details.
- Flashing GREEN – The battery is 80% charged.
- Solid GREEN – The battery is fully charged.



## Two-Way Radio Batteries

Power Products also offer a comprehensive line of batteries for two-way radios. Incorporating Japanese cells and manufactured to strict quality control standards, batteries from Power Products enjoy a well-earned reputation for performance and reliability.

call2recycle™



Power Products is a proud sponsor of Call2Recycle™, a program of the Rechargeable Battery Recycling Corporation (RBRC). By placing RBRC's Battery Recycling Seals on the rechargeable batteries that power cordless products, Power Products is dedicated to preserving the environment. For more information and for drop-off locations, visit [www.rbrc.org](http://www.rbrc.org) or call 800-8-BATTERY.

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