

# MEGA Electronics

MEGA Electronics Inc. has two distinct production divisions producing ROHS compliant power cords and power supplies in ISO certified plants in the Philippines and China. North American customers are serviced through the company's design, sales and stocking center in New Brunswick, NJ.

The Power Cord Division offers both domestic and international fully molded power cords to meet all medical requirements for your global markets. North American hospital grade plugs are molded without internal bridges, greatly increasing the integrity of the plug. Production starts with the drawing of individual conductor strands, bunching and twisting of conductors, extrusion of jackets and is completed with plug and connector molding all under one roof. The vertical integration ensures quality.

Power Supplies consist of universal input voltage AC/DC wall adaptors to 48W, desk tops to 200W, board mounting to 40W, open frames with active and passive PFC to 800W, DIN Rails to 960W and constant current and contact voltage LED drivers. DC/DC con-

verters are from 0.25W to 150W in SIP, DIP and chassis mount packages. AC/DC supplies are available with a variety of EN60320 inlets, cable lengths and gauges, ferrites, and output plugs. Custom production for these parts is the norm. The DC/DC portfolio consists of 4,000+ items with fixed and wide inputs, isolation voltages as high as 12kV and 100% burn in and testing.

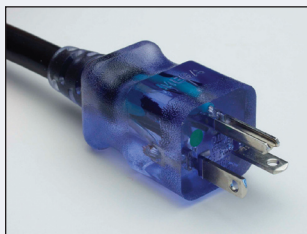
## Case Study: Robust Plug Leads to Lower Costs

A major medical device manufacturer producing warming beds faced with major repair costs and UL listing difficulties turned to MEGA to provide a solution.

In the harsh environment of hospitals, plugs are often yanked from walls, hit and smashed with no apparent damage. However small repetitive breaks at the pin and conductor junctions eventual can cause the plugs to

overheat and fail. The failure caused costly repair calls and the need to improve the plug performance.

MEGA created a new plug tool with a larger body capable of withstanding greater stresses. Each nickel plated solid pin is soldered to the conductor lowering the risk of individual strands breaking. In addition a metal retaining ring is applied to the cordage prior to over molding, greatly increasing the retention strength. The combination of these developments resulted in a near zero failure rate in the field.



Because of the proximity of the cord to the heating element inside of the bed UL requested a heat shield be installed to

shield the 60°C rated PVC cable. MEGA suggested the use of a 105°C rated SJT cable and upon testing the cord was accepted and removed an additional component and manufacturing step.



## Power Supplies & Cords

- Wall Adaptors with Interchangeable Plug Option
- Desk Top to 200W
- Open Frame with PFC
- DIN Rails to 960W
- LED Drivers
- Medical Approvals

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## Hospital Grade Powercords and DC to DC Converters

When power is critical to your equipment as well as your patients, you can rely on MEGA Electronics to deliver. Produced in ISO9000 facilities, our line of hospital grade powercords, related components and DC to DC converters all conform to the highest standards.

Upon your next requirement, please keep MEGA in mind.

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