Club 3D

Play your cards right

Newsletter

Amsterdam, November 15th, 2010

Club 3D B.V.
Helping to Shrink the Energy Appetite of Computers with 80 PLUS® Program:

Desktop computers, icon of the information age, have revolutionized the way we conduct business and how we communicate professionally. Modern organizations might find it impossible to function without these indispensable technological tools. However, despite their undeniable benefits, the widespread proliferation of computers has unexpectedly created unintended and problematic side effects. One side effect is the insatiable and uncontrollable energy appetite of these devices, which collectively consume as much as 10 to 15 percent of the overall energy bill of a typical commercial building. Club 3D is supporting a unique initiative called 80 PLUS to help resolve this problem. The program works to increase energy efficiency in computers and desktop-derived servers (smaller servers that typically run 24/7 and are used for simple functions such as managing network traffic and routing e-mail).

Over the years the call to computer manufacturers was that computers be better, faster and cheaper. How efficiently a computer utilized the energy it consumed wasn't considered an important feature…until now. Today, your organization's building operators, energy engineers and IT managers may be one of many facing challenges with infrastructure limitations and high electricity costs. You see the peak demand charges that come from your Heating, Ventilation and Air Conditioning (HVAC) system having to work harder to combat the waste heat generated by computers. And the impacts aren't just on the electric bill—the steady hum from noisy cooling fans within the computer detracts from a comfortable office environment and can reduce worker productivity.

The primary reason desktop computers generate so much heat is that the power supply—the internal device that converts alternating current (AC) into direct current (DC)—is only 60 to 70 percent efficient. These computer power supplies are sized to provide up to 200 to 600 watts of DC output, but can require up to 300 to 850 watts of maximum AC input, emitting the rest as heat and thus adding unnecessary demands on your building's HVAC system. Research shows that small percentage increases in power supply efficiency can result in significant reductions in heat output—as much at 40 percent! Furthermore, reductions in heat can improve the overall system reliability.

80 PLUS sets the standard for what constitutes an energy-efficient power supply. 80 PLUS means that a power supply is at least 80 percent efficient or greater at various load thresholds and is power factor corrected. On average, an 80 PLUS certified power supply saves 85 kWh per year in a computer and 301 kWh per year in a server. When including energy savings from reductions in cooling demands and line losses, utility bill savings estimates can be as high as $70 over the life of each computer and more than $200 for each server.

Some power supply manufacturers offer 80 PLUS certified power supplies, but they typically cost $5 to $10 more than commodity power supplies. Since most computer manufacturers continually seek ways to reduce component costs by pennies or even fractions of pennies, this incremental cost is substantial. Club 3D B.V. is funding 80 PLUS because it is specifically designed to overcome this market barrier. We cover the cost of the better power supply so you can enjoy the benefits. All you need to do is purchase 80 PLUS qualified power supply from Club 3D.

Play your cards right.

1000 W	850 W	700 W	600 W	400 W
TRIPLE CARD CONFIGURATION	DUAL CARD CONFIGURATION	DUAL CARD CONFIGURATION	SINGLE CARD CONFIGURATION	SINGLE CARD CONFIGURATION
CSP-X1000CB	**CSP-D850CB**	**CSP-D700CB**	**CSP-S600**	**CSP-S400**

www.club-3d.com