

## Five year warranty power supplies

In today's cost sensitive world it is easy to get caught up selling on price rather than selling the solution.

Interesting then that 50% of Lambda's standard power supply sales carry a five year warranty. Is it that their customers have lots more money to idly fritter away on this luxury, or do they realize the benefits?

One of the cost drivers is component derating. Inside most power supplies there are electrolytic capacitors containing a fluid based electrolyte. These capacitors will eventually dry out and fail. A typical capacitor will have a 4,000 hour life (160 days) run with a 105°C case temperature or 64,000 hours (2600 days) at 65°C.

Let's compare the capacitor in your cell phone charger which typically delivers peak power for fifteen minutes a day (adding up to four days total a year), with an industrial application running 24 hours a day, 365 days a year.

Run at maximum ratings the capacitor in your charger could last for 40 years, but in an industrial application that same capacitor will only last for 6 months. Not good when an on-site repair charge can easily run at \$500.

The solution is? Offer the right product in an industrial application. When designing a five year warranty power supply, Lambda runs their components cooler to make them last. Yes, it adds cost and makes a product more expensive, but long term it is what we at Lambda call "low cost of ownership".