The Laser Diode Control Unit (LDCU) is a turnkey power source that contains U.S. government-mandated safety features. The LDCU enables us at Power Technology to offer original equipment manufacturer (OEM) laser products as complete laser systems. An OEM product is one that is sold for integration into another product. OEM products do not incorporate government-mandated safety features. Original equipment manufacturers may purchase these products without any accompanying safety features or power supplies and are responsible for integrating their own safety features. End users, on the other hand, must purchase an LDCU to meet the U.S. government requirements for laser systems. A complete laser system is exactly what its name implies: a system complete with laser, power source, and required safety features. End users are defined as those not directly integrating a laser into another product. This description includes universities, research settings, and those using lasers on optical benches. The LDCU incorporates the following safety features to comply with government regulations for class 3B (or below) laser systems: a power on/off key switch, emission indicator, 5-second activation delay, beam blocker, and remote interlock and connector. Class 4 LDCU systems also include these safety features, in addition to a manual reset button on the front panel. We offer several versions of the LDCU, each accommodating laser modules with one of the following output voltages: 3.3, 5, 8, and 12VDC. Input voltages of 120 and 220VAC are available. A DB-9 (9-pin) connector is located on the rear panel of the LDCU. A bare wire adapter is available should your laser module not have a DB-9 connector installed. We have integrated all required safety features into the LDCU. Operating a laser head without an LDCU is contrary to government regulations.