



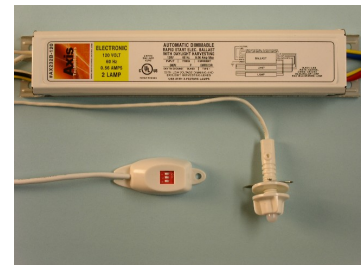
Energy Saving Daylight Harvesting
Integral Control Electronic Ballast



PRODUCT INFORMATION

Axis Technologies Inc. has developed a daylight harvesting electronic dimming ballast for fluorescent T-8 lamps. The Axis automatic control system allows each individual fluorescent fixture to significantly increase its energy efficiency over standard non-controlled systems, and can reduce energy consumption up to 70%.

The patented Axis system produces energy savings two ways. First, it uses an integral dip switch control (adjustable ballast factor) to adjust the maximum light output, tuning the light to only the minimum needed to meet the room lighting needs. The light output can be adjusted from 100% down to 40%, in increments of 10%, to prevent wasteful over lighting of the room.



The second, and primary, method of energy saving is the daylight harvesting itself. Daylight Harvesting is simply the use of natural lighting to replace electric lighting in illuminating a room. Each Axis ballast has an integral photo sensor that reduces electric light in direct response to increases in natural light. The photo sensor is automatic, provides immediate response, and requires no adjustments or maintenance. The photo sensor will reduce energy below the dip switch maximum set light output, but will not exceed it.

While the Axis system dims the fluorescent light, it is important to understand that the room light level is never reduced. The lights only dim as the room is growing brighter from natural light contribution. The dimming and brightening is continuous and automatic, in direct response to the detected natural light, allowing its operation to go unnoticed by room occupants.

A key feature of the Axis system is that each light fixture has its own photo sensor. This allows for a smaller zone of control, increasing accuracy and allowing for higher energy savings.

The Axis system uses integrated hardwired controls, and no external controls or additional wiring are required. The simplicity of the design provides the lowest acquired and installed cost of any daylight harvesting system. The Axis system offers the highest amount of kilowatt hour reduction, and highest daytime peak demand load reduction, short of turning lights off. The high energy savings translate to a high cost value, particularly when considering the product Life Cycle Cost.

