SYLVANIA QUICKTRONIC® POWERSENSE™ T8 DIMMING UNIVERSAL VOLTAGE

High Efficiency Series

Lamp/Ballast Guide

32W T8 - SYLVANIA OCTRON®

1-lamp QTP1x32T8/UNV DIM
2-lamp QTP2x32T8/UNV DIM
3-lamp QTP3x32T8/UNV DIM
4-lamp QTP4x32T8/UNV DIM

Primary Lamp Types
FO32, FBO32

Also operates:
FO25, FO17

Key System Features

- **POWERSENSE compatibility with low voltage and power line dimmers**
- **High Efficiency**
- **Lamp Detection Technology**
- **Universal voltage (120-277)**
- **100 - 5% Dimming Range**
- **PROStart programmed start**
- **Anti-flash circuitry - turns on in dimmed mode**
- **Lightweight and low profile**
- **Operates at >42kHz**
- **QUICK 60+ ballast and lamp warranty**

System Information

SYLVANIA QUICKTRONIC POWERSENSE ballasts operate linear fluorescent T8 lamps over a wide (100 - 5%) dimming range and provide true versatility in controls selection.

QUICKTRONIC POWERSENSE ballasts feature micro-controller technology to offer the industry’s most adaptable dimming ballast. Compatibility with low voltage controls, power line dimmers and any line voltage from 120V to 277V, provides the flexibility to greatly simplify the specification, purchasing and installation process.

Patented lamp detection technology delivers unmatched performance. Variations in brightness from lamp-to-lamp are virtually eliminated, providing uniform lighting throughout the dimming range. At light levels of >75% unnecessary lamp-coil power is turned off, delivering energy efficiencies comparable to non-dimming Instant start electronic ballast.

Quicktronic POWERSENSE ballasts operate from standard low voltage (0-10VDC) fluorescent controllers or compatible 2-wire power line fluorescent dimmers, making them ideal for individual office lighting or automated building applications, both in new construction and retrofit projects.

For the individual office or conference room, installation can be streamlined by using a 2-wire power line dimmer; eliminating the need for additional control wires.

For more advanced systems, such as daylight harvesting or building automation applications, standard low voltage devices (0-10VDC, Class 1 or 2) are used to control the lighting system. In this daylight harvesting example, each lighting fixture (or fixture row) is controlled by its own photo-sensor; regulating the light output to compensate for changes in natural daylight. Depending upon the specific application, energy savings of up to 60% compared to fixed output T8 electronic systems can be realized.

Application Information

SYLVANIA QUICKTRONIC POWERSENSE is ideally suited for:

- Occupancy sensors
- Daylight harvesting
- Energy management
- Load shedding
- Commercial
- Retail
- Hospitality
- Institutional
- Schools
- New construction
- Retrofit

This technology also eases installation and troubleshooting by recognizing failed lamps, faulty wiring or loose connections, and shutting down. When the problem is corrected, the system restarts automatically.

All SYLVANIA Professional Series (QTP) electronic ballasts feature high power quality (<10% THD), lightweight, low profile designs.

Setting the standard for quality, QUICKTRONIC POWERSENSE is covered by our QUICK 60+® warranty, the first and most comprehensive lamp & ballast system warranty in the industry.

All QUICKTRONIC POWERSENSE models include a line voltage protection circuit, which protects the ballast in the event that line voltage is inadvertently applied to the low voltage control inputs.

SEE THE WORLD IN A NEW LIGHT SYLVANIA
High Efficiency Electronic T8 Fluorescent Controllable Lighting Systems

<table>
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<tr>
<th>Item Number</th>
<th>Description*</th>
<th>Input Voltage (VAC)</th>
<th>Input Current (AMPS)</th>
<th>Lamp Type</th>
<th>Rated Lumens (lm)</th>
<th>No. of Lamps</th>
<th>Ballast Factor (BF)</th>
<th>System Lumens</th>
<th>Input Power (Watts)</th>
<th>System Efficacy (lm/W)</th>
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<td>50705</td>
<td>QTP 1x32T8/UNV DIM-TC</td>
<td>120-277</td>
<td>0.27/0.12</td>
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* POWERSENSE T8 replaces former Helios T8 dimming products.

Dimensions:

1 & 2 lamp enclosure
Overall: 9.5" L x 1.68" W x 1.0" H (241 x 43 x 25 mm)
Mounting: 8.90" (226 mm)
Weight: 1.1 lbs each (500 g)

3 & 4 lamp enclosure
Overall: 16.7" L x 1.68" W x 1.0" H (425 x 43 x 25 mm)
Mounting: 16.2" (411 mm)
Weight: 2.1 lbs each (950 g)

Specifications

Starting Method: Programmed Rapid Start

Circuit Type: Series
Lamp Frequency: >40 KHz
Lamp CCF: Less than 1.7

Starting Temp: 50°F/10°C minimum
Input Voltage: 120-277V, +/-10%
Input Frequency: 50/60 Hz
THD: <10% @ full Output
Power Factor: >98% @ full Output

UL Listed Class P, Type 1 Outdoor
CSA or C/UL Certified
70°C Max Case Temperature
FCC 47CFR Part 18 Non-Consumer
Class A Sound Rating
ANSI C62.41 Cat. A Transient Protection
Remote Mounting up to 8 feet
Specifications subject to change without notice.

Control Information

QUICKTRONIC POWERSENSE ballasts are compatible with a wide range of low voltage (0-10VDC) and power line fluorescent controllers available from various manufacturers. Please see controls list on previous page or contact OSRAM SYLVANIA. QUICKTRONIC products are covered by QUICK 60+® , a comprehensive lamp and ballast system warranty. For additional details, refer to the QUICK 60+ warranty bulletin.
Control Options with POWERSENSE Ballasts

QUICKTRONIC® POWERSENSE™ T8 DIMMING UNV

Dimming Control Wiring Examples

### Wallbox Style 2-wire Power-line Control

**2-wire Power-line Control with POWERSENSE Ballasts**

Examples: Leviton IPX series operate as single pole or 3-way models. Available in 120 V and 277 V models. Leviton 6668-1W (white) 120 V single pole fluorescent dimmer.

Power Line Control Specs:
Specification-grade controls are available for 120V or 277V operation of controllable analog electronic fluorescent ballasts. Controls must be suitably rated for both the type (e.g. Fluorescent Phase-control) and size (e.g. 600W) of the connected load.

CAUTION:
For 2-wire Power-line wiring, individually insulate (cap-off) all unused Violet & Gray leads as shown.

### Wallbox Style 0-10V Control with Power Switch

**0-10V DC Control with POWERSENSE Ballasts**

Examples: Lithonia model ISD BC or Leviton IP 710 Series (These 0-10V dc, 120/277V models can be wired for single pole application (shown); these models can also be wired for 3-way applications.)

### Photo Sensor 0-10V

**Photo Sensor 0-10V Wiring Example**

**0-10V DC Control with POWERSENSE Ballasts**

Photo Sensor 0-10V Wiring Example
## QUICKTRONIC® POWERSENSE™ CONTROLS INFO.

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<th>Fluorescent Power-line Controllers</th>
<th>0-10 VDC Controllers</th>
<th>Photo Cells</th>
<th>Occupancy Sensors</th>
<th>Building Management Systems</th>
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Please contact controls manufacturers to order/specify controls. For the latest controls list go to www.sylvania.com

Also for more information, check out the LCA (Lighting Controls Association) site: www.aboutlightingcontrols.org

### Control Specifications/model numbers may change. Please consult manufacturers listed for their latest control models and to order their controls.

### WARNING:
Install and wire these ballast and controls in accordance with the National Electrical Code (NEC), all applicable Federal, State and local electrical codes, as well as the specific instructions provided with the compatible control that you purchased. Installation should be performed by qualified personnel only.

These instructions are guidelines only. Installation may vary for different controls/fixtures/applications. Be sure to follow the control instructions and all applicable codes and standards when installing dimming systems.

Please contact controls manufacturer listed in the OSRAM SYLVANIA Inc. controls cross reference for compatible controls and instruction wiring

NOTES: 1. Dimming ballasts source < 0.5mA (0-10VDC control input).
   2. Power-line controls must be rated for the type (e.g. Fluorescent Phase-control) and size (e.g. 600W, 1000W, 1500W & 2000W etc.) of the connected load. Do NOT use incandescent power-line controls; incandescent dimmers are not rated for fluorescent loads and are NOT compatible with POWERSENSE ballasts.