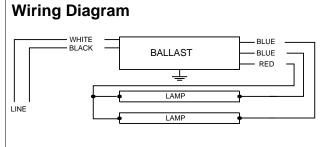


Electrical Specifications

| IOPA2P32LWN@120V | | | | | |
|------------------|---------------|--|--|--|--|
| Brand Name | OPTANIUM | | | | |
| Ballast Type | Electronic | | | | |
| Starting Method | Instant Start | | | | |
| Lamp Connection | Parallel | | | | |
| Input Voltage | 120-277 | | | | |
| Input Frequency | 50/60 HZ | | | | |
| Status | Active | | | | |

| Lamp Type | Num. of Lamps | Rated Lamp Watts | Min. Start Temp (°F/C) | Input Current (Amps) | Input Power (ANSI Watts) | Ballast Factor | MAX THD % | Power Factor | MAX Lamp Current Crest Factor | B.E.F |
|-----------|---------------------|---------------------|---------------------------|----------------------------|-----------------------------------|-------------------|-----------------|-----------------|-------------------------------------|-------|
| F32T8 | 1 | 32 | -20/-29 | 0.26 | 31 | 0.90 | 10 | 0.99 | 1.6 | 2.90 |
| * F32T8 | 2 | 32 | -20/-29 | 0.41 | 48 | 0.77 | 10 | 0.99 | 1.6 | 1.60 |



Diag. 64-A

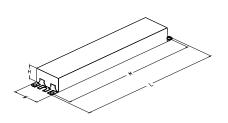
The wiring diagram that appears above is for the lamp type denoted by the asterisk (*)

Standard Lead Length (inches)

| | in. | cm. |
|--------|-----|-------|
| Black | 25 | 63.5 |
| White | 25 | 63.5 |
| Blue | 31 | 78.7 |
| Red | 46 | 116.8 |
| Yellow | | 0 |
| Gray | | 0 |
| Violet | | 0 |
| | | |

| CHESI | | |
|--------------|-----|-----|
| 51100) | in. | cm. |
| Yellow/Blue | | 0 |
| Blue/White | | 0 |
| Brown | | 0 |
| Orange | | 0 |
| Orange/Black | | 0 |
| Black/White | | 0 |
| Red/White | | 0 |

Enclosure



Enclosure Dimensions

| OverAll (L) | Width (W) | Height (H) | Mounting (M) |
|-------------|-----------|------------|--------------|
| 9.5 " | 1.3 " | 1.0 " | 8.9 " |
| 9 1/2 | 1 3/10 | 11_ | 8 9/10 |
| 24.1 cm | 3.3 cm | 2.5 cm | 22.6 cm |

Revised 05/19/2010





Data is based upon tests performed by Philips Lighting Electronics N.A. in a controlled environment and is representative of relative performance. Actual performance can vary depending on operating conditions. Specifications are subject to change without notice. All specifications are nominal unless otherwise noted.



Electrical Specifications

| IOPA2P32LWN@120V | | | | | |
|------------------|---------------|--|--|--|--|
| Brand Name | OPTANIUM | | | | |
| Ballast Type | Electronic | | | | |
| Starting Method | Instant Start | | | | |
| Lamp Connection | Parallel | | | | |
| Input Voltage | 120-277 | | | | |
| Input Frequency | 50/60 HZ | | | | |
| Status | Active | | | | |

Notes:

Section I - Physical Characteristics

- 1.1 Ballast shall be physically interchangeable with standard electromagnetic or standard electronic ballasts, where applicable,
- 1.2 Ballast shall be provided with integral leads color-coded per ANSI C82.11.

Section II - Performance Requirements

- 2.1 Ballast shall be _____ (Instant or Programmed) Start.
- 2.2 Ballast shall provide Independent Lamp Operation (ILO) for Instant Start or Programmed Start Parallel ballasts allowing remaining lamp(s) to maintain full light output when one or more lamps fail.
- 2.3 Ballast shall contain auto restart circuitry in order to restart lamps without resetting power.
- 2.4 Ballast shall operate from 50/60 Hz input source of 120V through 277V with sustained variations of +/- 10% (voltage and frequency). GOPA ballasts shall operate from an input source of 347V.
- 2.5 Ballast shall be high frequency electronic type and operate lamps at a frequency between 42 kHz and 52 kHz to avoid interference with infrared devices, eliminate visible flicker and avoid Article Surveillance System, such as anti-theft devices.
- 2.6 Ballast shall have a Power Factor greater than 0.98 for primary lamp.
- 2.7 Ballast shall have a minimum ballast factor for primary lamp application as follows: 0.77 for Low Watt, 0.87 for Normal Light Output, and
- 1.18 for High Light for Instant Start ballasts or 0.71 for Low Watt and 0.88 for Normal Light Output for Programmed Start ballasts.
- 2.8 Ballast shall provide for a Lamp Current Crest Factor of 1.7 or less.
- 2.9 Ballast input current shall have Total Harmonic Distortion (THD) of less than 10% when operated at nominal line voltage with primary lamp.
- 2.10 Ballast shall have a Class A sound rating for all 4-foot lamps and smaller.
- 2.11 Ballast shall have a minimum starting temperature of -29C (-20F) on Instant Start ballasts or -18C (0F) on Programmed Start ballasts for standard T8 lamps and 16C (60F) for energy-saving T8 lamps. Consult lamp manufacturer for temperature versus light output characteristics.
- 2.12 Ballast shall tolerate sustained open circuit and short circuit output conditions.
- 2.13 Ballast shall have lamp striation-reduction circuitry.
- 2.14 Programmed Start ballast shall provide lamp EOL protection circuitry.
- 2.15 Maximum remote distance for Energy Saving Lamps in Remote/Tandem applications is 6 feet for ICN, IOP, and IOPA Instant Start and Programmed Start models.

Section III - Regulatory Requirements

- 3.1 Ballast shall not contain any Polychlorinated Biphenyl (PCB).
- 3.2 Ballast shall be Underwriters Laboratories (UL) listed, Class P and Type 1 Outdoor; and Canadian Standards Association (CSA) certified where applicable.
- 3.3 Ballast shall comply with ANSI C62.41 Category A for Transient protection.
- 3.4 Ballast shall comply with ANSI C82.11 where applicable.
- 3.5 Ballast shall comply with the requirements of the Federal Communications Commission (FCC) rules and regulations, Title 47 CFR part 18, Non-Consumer (Class A) for EMI/RFI (conducted and radiated).
- 3.6 Ballast shall meet NEMA/CEE High Performance T8 Lighting System Specifications.
- 3.7 IOP ballasts shall comply with UL Type CC rating.
- 3.8 Ballast shall comply with NEMA 410 for in-rush current limits.

Section IV - Other

- 4.1 Ballast shall be manufactured in an ISO 9001 Qualified factory.
- 4.2 Ballast shall carry a five-year warranty from date of manufacture against defects in material or workmanship, including replacement, for operation at a maximum case temperature of 70C. Ballasts with a "90C" designation in their catalog number shall also carry a three-year warranty at maximum case temperature of 90C.
- 4.3 Manufacturer shall have a twenty-year history of producing electronic ballasts for the North American market.

| Notes: | | | |
|--|--|---|---|
| 1. Energy-saving T8 lamps (25W, | 28W or 30W) may experience lar | mp striations if operated on ballas | sts not rated for their use. |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| Revised 05/19/2010 | (SP) | | |
| | | | |
| | | | |
| Data is based upon tests performed by Ph | nilips Lighting Electronics N.A. in a controll conditions. Specifications are subject to ch | led environment and is representative of | relative performance. Actual performance can vary |
| depending on operating t | portuniona. Opeonicationa are subject to cr | iange without notice. All specifications at | o nominai unicos otnerwise noteu. |