



LED DirecT8™

Instant Start Ballast Compatible

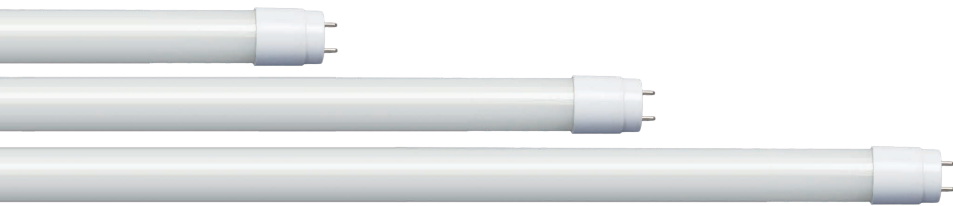
LED compatible replacement for linear fixtures with instant start ballasts*

Limitless options for the following applications:

- Offices
- Restaurants
- Retail Stores
- Lobbies
- Schools
- Hospitals

Great features and benefits:

- >40% Energy Savings
- Long life: 50,000 hours
- No rewiring of fixture — just replace fluorescent lamp with LED lamp
- Instant on/off
- 2', 3' and 4' options available
- No Mercury
- 5 year warranty
- Rated for enclosed fixtures
- Food service rating available



Direct8™
LED



LED
we know light.™



LED DirecT8™ Instant Start Ballast Compatible

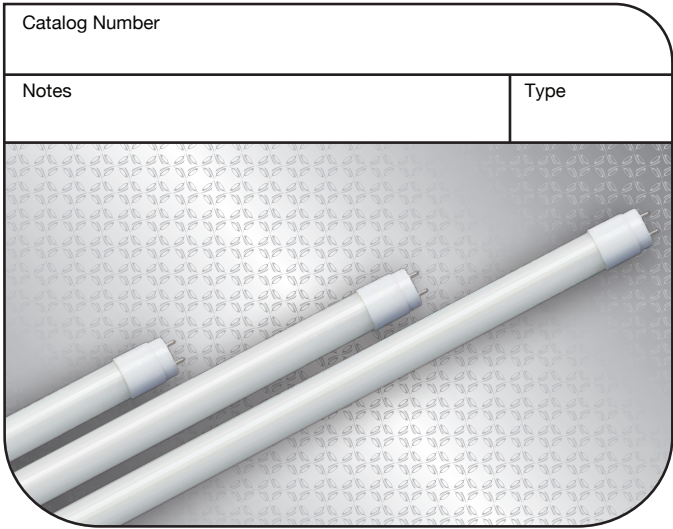
LED 50,000 hours average rated life, 120-277 volts

Applications:

LED compatible replacement for linear fixtures with instant start ballasts*

Features

| | |
|--|--|
| >40% energy savings | No mercury |
| Long life - 50,000 hours | 5 year warranty |
| Instant on/off | 2', 3' and 4' options available |
| No rewiring of fixture — just replace fluorescent lamp with LED lamp | Rated for enclosed fixtures Food service rating available |



Specifications

| | |
|-----------------------------|-------------|
| Input Line Voltage: | 120-277 VAC |
| Minimum Starting Temp..... | -30°C |
| Maximum Operating Temp..... | 55°C |
| Beam Distribution | 190° |

NOTE: Must be used with shunted sockets
Not compatible with emergency ballasts with DC output



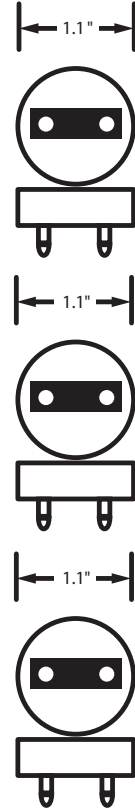
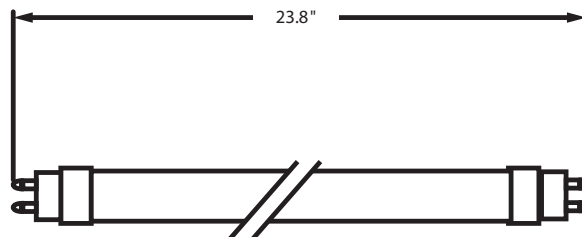
4 Foot Dimensions



3 Foot Dimensions



2 Foot Dimensions





LED DirecT8™ Instant Start Ballast Compatible

Glass Tubes

| Warranties and Certifications: | Item # | Description | Bare Lamp Wattage | | | | System Wattage | | | | Lamp Lumens | | | Base | CCT | CRI | R9 |
|--|-----------------|---|-------------------|--------|--------|--------|----------------|------|------|-----|-------------|-----|--------|------|-----|-----|----|
| | | | (0.88) | (0.78) | (0.88) | (1.18) | LBF | NBF | HBF | LBF | NBF | HBF | (0.78) | | | | |
| 5 YEAR WARRANTY | LED4T820IS30K | LED 20W Instant Start Compatible 4 Foot T8 - 3000K | 20 | 20 | 22.7 | 26.7 | 1715 | 1950 | 2600 | G13 | 3000K | 80 | >0 | | | | |
| | LED4T820IS35K | LED 20W Instant Start Compatible 4 Foot T8 - 3500K | 20 | 20 | 22.7 | 26.7 | 1760 | 2000 | 2680 | G13 | 3500K | 80 | >0 | | | | |
| | LED4T820IS41K | LED 20W Instant Start Compatible 4 Foot T8 - 4100K | 20 | 20 | 22.7 | 26.7 | 1800 | 2050 | 2740 | G13 | 4100K | 80 | >0 | | | | |
| | LED4T820IS50K | LED 20W Instant Start Compatible 4 Foot T8 - 5000K | 20 | 20 | 22.7 | 26.7 | 1840 | 2100 | 2800 | G13 | 5000K | 80 | >0 | | | | |
| ANSMPF 2 Fabricated Food Service Equipment ©38EJ> | LED4T815IS30K | LED 15W Instant Start Compatible 4 Foot T8 - 3000K | 15 | 15 | 17 | 20 | 1440 | 1625 | 2175 | G13 | 3000K | 80 | >0 | | | | |
| | LED4T815IS35K | LED 15W Instant Start Compatible 4 Foot T8 - 3500K | 15 | 15 | 17 | 20 | 1460 | 1650 | 2210 | G13 | 3500K | 80 | >0 | | | | |
| | LED4T815IS41K | LED 15W Instant Start Compatible 4 Foot T8 - 4100K | 15 | 15 | 17 | 20 | 1500 | 1700 | 2280 | G13 | 4100K | 80 | >0 | | | | |
| | LED4T815IS50K | LED 15W Instant Start Compatible 4 Foot T8 - 5000K | 15 | 15 | 17 | 20 | 1550 | 1750 | 2340 | G13 | 5000K | 80 | >0 | | | | |
| | LED4T815IS41KSS | LED 15W Instant Start Compatible SHATTER COAT 4 Foot T8 - 4100K | 15 | 15 | 17 | 20 | 1500 | 1700 | 2280 | G13 | 4100K | 80 | >0 | | | | |
| | LED4T815IS50KSS | LED 15W Instant Start Compatible SHATTER COAT 4 Foot T8 - 5000K | 15 | 15 | 17 | 20 | 1550 | 1750 | 2340 | G13 | 5000K | 80 | >0 | | | | |
| "SHATTER COAT" LAMPS ARE NSF RATED | LED3T811IS30K | LED 12.5W Instant Start Compatible 3 Foot T8 - 3000K | 12.5 | 13 | 15 | 17.5 | 1170 | 1325 | 1770 | G13 | 3000K | 80 | >0 | | | | |
| | LED3T811IS35K | LED 12.5W Instant Start Compatible 3 Foot T8 - 3500K | 12.5 | 13 | 15 | 17.5 | 1190 | 1350 | 1810 | G13 | 3500K | 80 | >0 | | | | |
| | LED3T811IS41K | LED 12.5W Instant Start Compatible 3 Foot T8 - 4100K | 12.5 | 13 | 15 | 17.5 | 1240 | 1400 | 1870 | G13 | 4100K | 80 | >0 | | | | |
| | LED3T811IS50K | LED 12.5W Instant Start Compatible 3 Foot T8 - 5000K | 12.5 | 13 | 15 | 17.5 | 1280 | 1450 | 1940 | G13 | 5000K | 80 | >0 | | | | |
| | LED2T89IS30K | LED 10.5W Instant Start Compatible 2 Foot T8 - 3000K | 10.5 | 11 | 12.5 | 14.5 | 720 | 900 | 1125 | G13 | 3000K | 80 | >0 | | | | |
| | LED2T89IS35K | LED 10.5W Instant Start Compatible 2 Foot T8 - 3500K | 10.5 | 11 | 12.5 | 14.5 | 740 | 930 | 1150 | G13 | 3500K | 80 | >0 | | | | |
| | LED2T89IS41K | LED 10.5W Instant Start Compatible 2 Foot T8 - 4100K | 10.5 | 11 | 12.5 | 14.5 | 770 | 970 | 1200 | G13 | 4100K | 80 | >0 | | | | |
| | LED2T89IS50K | LED 10.5W Instant Start Compatible 2 Foot T8 - 5000K | 10.5 | 11 | 12.5 | 14.5 | 800 | 1010 | 1250 | G13 | 5000K | 80 | >0 | | | | |

Plastic Tubes (Rated for Food Service)

| Warranties and Certifications: | Item # | Description | Bare Lamp Wattage | | | | System Wattage | | | | Lamp Lumens | | | Base | CCT | CRI | R9 |
|--|---------------|--|-------------------|--------|--------|--------|----------------|------|------|-----|-------------|-----|--------|------|-----|-----|----|
| | | | (0.88) | (0.78) | (0.88) | (1.18) | LBF | NBF | HBF | LBF | NBF | HBF | (0.78) | | | | |
| 5 YEAR WARRANTY UL CERTIFIED TO NSF STANDARDS | LED15T84IS35K | LED 15W Instant Start Compatible 4 Foot T8 - 3500K | 14.9 | 15.0 | 17.4 | 20.5 | 1418 | 1600 | 2145 | G13 | 3500K | 80 | >0 | | | | |

* See instant start compatibility at www.tcp.com



LED DirecT8™ Instant Start Ballast Compatible

DIRECT8™ LED Tube Ballast Compatibility Guide

| Manufacturer | Series | Model | Voltage |
|--|---------|------------------------------|---------|
| General Electric | | GE132MAX-L/ULTRA | UNIV |
| | | GE132MAXP-N/ULTRA | UNIV |
| | | GE232MAX347-N | 347 |
| | | GE232MAX-N/ULTRA | UNIV |
| | | GE232MAX-G-N/Ultra | UNIV |
| | | GE232MAXP-H/ULTRA | UNIV |
| | | GE332MAXP-H/ULTRA | UNIV |
| | | GE332MAXP-N/ULTRA | UNIV |
| | | GE332MAX-L/ULTRA | UNIV |
| | | GE332MAX-G-N | UNIV |
| | | GE432MAX347-N | 347 |
| Osram | QHE | 2x32T8/ISN-SC | UNIV |
| | QHE | 2x32T8/ISN-SC | 347 |
| Philips | Advance | GOPA-2P32-SC | 347 |
| | Advance | GOPA-4P32-SC | 347 |
| | Advance | ICN-2P32-N | UNIV |
| | Advance | ICN-3P32-N | UNIV |
| | Advance | ICN-4P32-N | UNIV |
| | Advance | IOP-2P32-LW-N | UNIV |
| | Advance | IOP-3P32-N | UNIV |
| | Advance | IOPA-4P32-LW-N | UNIV |
| | Advance | IOPA-4P32-LW-SC | UNIV |
| | Advance | IOPA-4P32-N | UNIV |
| TCP | | E2P32ISUNVE | UNIV |
| | | E2P32ISUNVHE | UNIV |
| | | E2P32ISUNVLE | UNIV |
| | | E3P32ISUNVE | UNIV |
| | | E3P32ISUNVHE | UNIV |
| | | E3P32ISUNVLE | UNIV |
| | | E4P32ISUNVE | UNIV |
| | | E4P32ISUNVHE | UNIV |
| | | E4P32ISUNVLE | UNIV |
| Universal Lighting Technologies | Triad | B132IUNVHP-N | UNIV |
| | Triad | B232IUNVHP-N | UNIV |
| | Triad | B332IUNVHP-A | UNIV |
| | Triad | B432IUNVHP-A | UNIV |
| | Triad | B232I347HP-A | 347 |
| | Triad | B432I347HP -000C | 347 |
| IOTA | | I-320 IOTA EMERGENCY BALLAST | |



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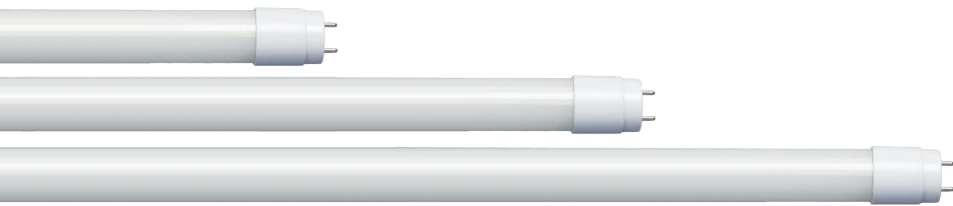
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DiracT8™
LED



LED
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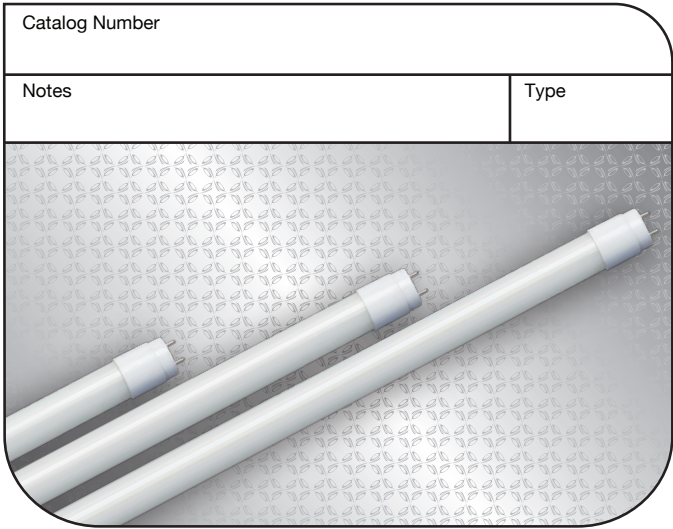
LED 50,000 hours average rated life, 120-277 volts

Applications:

LED compatible replacement for linear fixtures with instant start ballasts*

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| Instant on/off | 2', 3' and 4' options available |
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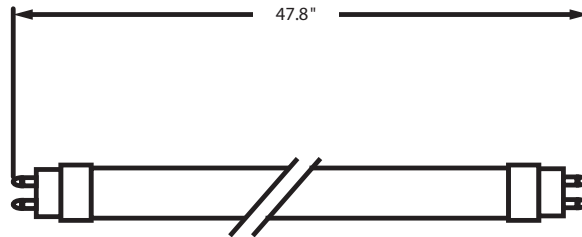
Specifications

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|-------------------------|-------------|
| Input Line Voltage: | 120-277 VAC |
| Minimum Starting Temp: | -30°C |
| Maximum Operating Temp: | 55°C |
| Beam Distribution | 190° |

NOTE: Must be used with shunted sockets
Not compatible with emergency ballasts with DC output



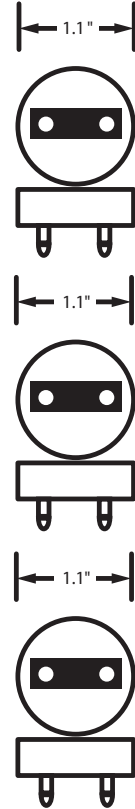
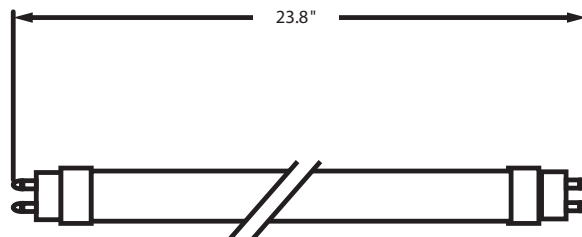
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3 Foot Dimensions



2 Foot Dimensions





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| 5 YEAR WARRANTY UL CERTIFIED TO NSF STANDARDS | LED15T84IS35K | LED 15W Instant Start Compatible 4 Foot T8 - 3500K | 14.9 | 15.0 | 17.4 | 20.5 | 1418 | 1600 | 2145 | G13 | 3500K | 80 | >0 | | | |

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| Manufacturer | Series | Model | Voltage |
|--|---------|------------------------------|---------|
| General Electric | | GE132MAX-L/ULTRA | UNIV |
| | | GE132MAXP-N/ULTRA | UNIV |
| | | GE232MAX347-N | 347 |
| | | GE232MAX-N/ULTRA | UNIV |
| | | GE232MAX-G-N/Ultra | UNIV |
| | | GE232MAXP-H/ULTRA | UNIV |
| | | GE332MAXP-H/ULTRA | UNIV |
| | | GE332MAXP-N/ULTRA | UNIV |
| | | GE332MAX-L/ULTRA | UNIV |
| | | GE332MAX-G-N | UNIV |
| | | GE432MAX347-N | 347 |
| Osram | QHE | 2x32T8/ISN-SC | UNIV |
| | QHE | 2x32T8/ISN-SC | 347 |
| Philips | Advance | GOPA-2P32-SC | 347 |
| | Advance | GOPA-4P32-SC | 347 |
| | Advance | ICN-2P32-N | UNIV |
| | Advance | ICN-3P32-N | UNIV |
| | Advance | ICN-4P32-N | UNIV |
| | Advance | IOP-2P32-LW-N | UNIV |
| | Advance | IOP-3P32-N | UNIV |
| | Advance | IOPA-4P32-LW-N | UNIV |
| | Advance | IOPA-4P32-LW-SC | UNIV |
| | Advance | IOPA-4P32-N | UNIV |
| TCP | | E2P32ISUNVE | UNIV |
| | | E2P32ISUNVHE | UNIV |
| | | E2P32ISUNVLE | UNIV |
| | | E3P32ISUNVE | UNIV |
| | | E3P32ISUNVHE | UNIV |
| | | E3P32ISUNVLE | UNIV |
| | | E4P32ISUNVE | UNIV |
| | | E4P32ISUNVHE | UNIV |
| | | E4P32ISUNVLE | UNIV |
| Universal Lighting Technologies | Triad | B132IUNVHP-N | UNIV |
| | Triad | B232IUNVHP-N | UNIV |
| | Triad | B332IUNVHP-A | UNIV |
| | Triad | B432IUNVHP-A | UNIV |
| | Triad | B232I347HP-A | 347 |
| | Triad | B432I347HP -000C | 347 |
| IOTA | | I-320 IOTA EMERGENCY BALLAST | |