LEVITON®

Sector T5 Ballasts

Intelligent dimming ballasts for use with energy-efficient T5 fluorescent lamps

- Daylight Harvesting
- Automatic Sensing
- Personal Controls
- New Construction or Retrofit
- Dimmable from 100% to 1%
- Ballasts, occupancy sensors, and control stations connect on a single two conductor bus, topology-free, and polarity-free
- Smooth Fade, Flicker Free
- Supports Sector two-way Communication via SectorNET Network
- Alternate Control by 0-10VDC Analog Control

DESCRIPTION

According to the U.S. Department of Energy (USDOE), lighting typically constitutes 30% to 35% of a building's total energy load. Leviton's Sector family of products offers immediate cost and energy savings by managing your lighting needs and reducing your energy consumption in the most efficient and cost effective way possible.

The Leviton line of smart dimming ballasts is designed with T5 fluorescent lamps in mind, and offers two-way communications using an enhanced proprietary Sector protocol. These ballasts fully integrate with Sector devices and any other products using the Sector communication protocol. The Sector ballasts also operate as 0-10V dimming ballasts, and are programmable with individual addresses that can be easily configured or reconfigured into zones over a pair of control wires.

APPLICATIONS

Sector ballasts can conveniently be integrated into existing installations with off-the-shelf fixtures, or can be installed as part of the complete Sector lighting system. Sector dimming ballasts integrate seamlessly with the Leviton Sector network. Sector T5 Smart Ballasts are ideal for use in office buildings, schools, medical offices, restaurants, government facilities and any other location that could benefit from the cost savings and energy efficiency of a controlled lighting environment. The Sector family of products provides a scalable solution that allows you to install a maximum of 253 Bus Controllers, each controlling a maximum of 64 devices each, for complete system flexibility and maximum coverage in any application.

Leviton Mfg. Co., Inc. Lighting & Energy Solutions
201 N. Service Rd. Melville, NY 11747-3138 Tech Line: 1-800-824-3005 Fax: 1-800-832-9538 www.leviton.com/les

PRODUCT DATA

FEATURES

- **Immediate Energy and Cost Savings:** reduce energy costs 30% to 60% by converting existing manual lighting configurations to a Sector lighting system
- **Minimal Installation Time:** color coded easy-insert connectors simplify wiring and minimize installation time
- **Size:** ballast is physically interchangeable with standard electromagnetic or standard electronic ballasts, where applicable; offered in two different sizes to fit in different fixture types
- **Three-Part Labeling System:** each uniquely addressable ballast can be tracked by giving one of three address stickers to the installer, placing one address sticker on the physical plans, and one sticker on the ballast itself
- **Protection:** end-of-life protection system safely prevents lamp from overheating, and maximizes the life of the ballast

  Ballast is provided with integral protection circuitry to withstand mis-wiring of low voltage control leads to main power supply
- **Custom Controls for Individual Users:** personal Dimmer Option (PDO) available on end-user computer desktop for real time and custom lighting control
- **Flicker-Free Dimming:** smooth fade throughout dimming range of 100% to 1%
- **Network Controlled:** two-way communications via network for control of individual luminaires or zones
- **Topology-Free and Polarity-Free:** ballasts, occupancy sensors, and control stations connect on a single two conductor bus, topology-free, and polarity-free; compatible with Class 1 or Class 2 digital bus wires for simplified installation
- **Safe and Stable:** automatic restart and shutdown modes enhance safety; brown-out protection provides stable performance
- **Non-Volatile Memory:** learned settings saved in protected memory are not lost during power outages
- **Warning System:** lamp failure, lamp removal and filament failure detection
- **Programmed Start Design:** preheats lamp cathodes prior to applying full arc voltage
- **Increased Lamp Life:** programmed start operation maximizes lamp life
- **Preset Start:** lamps will turn on without starting at full brightness
- **Ballast Power Loss:** if the ballast experiences power loss, the ballast(s) will respond to their preset level or action on power restoration (i.e., upon a generator start); this can be programmed to the user's individual requirements
- **Bus Controller Power Loss:** if a power outage occurs and the Bus Controller loses power, the ballasts will go to full (maximum illumination) or present level
- **Load Shed:** supports three network load shed levels
- **Sound Rating:** inaudible in 27dB ambient
- **100% Test:** Leviton tests the performance of every ballast prior to shipment; this important step maximizes quality
- **100% Burn-in:** Leviton "burns in" every ballast prior to shipment; defects due to faulty components are screened out in this process, resulting in a dramatic reduction of early failures in the field

SPECIFICATIONS

Electrical

- Voltage: automatic voltage function, operating input voltage range from 120-277V ±10% (50/60Hz) - reduces SKUs required in inventory
- Ballast factor: 1.00 at full light output and 0.01 at minimum light output
- Lamp current crest factor: 1.7 or less at full light output and throughout the dimming range in accordance with lamp manufacturer recommendations
- Power Factor: 0.99 High Power factor
- Thermal protection: Class P inherent thermal protection
- Wires: the digital bus (communication wires) and 0-10V analog control are Class 1 or Class 2 for topology-free and polarity-free wiring
- Distortion: less than 10% Total Harmonic Distortion
- Control Output SectorNET: 40V dimming
- Digital bus: Class 1 or Class 2, topology and polarity-free
- Ballast Frequency >42KHz throughout operating mode minimizes risk of interference with infrared remote control systems and provides continuous, flicker-free dimming

Environmental

- Ambient temperature range: 10°C - 50°C (50°F - 122°F)
- Maximum case temperature: 167°F (75°C) measured at the calibration point indicated on the product label
- Relative humidity: < 90% non-condensing

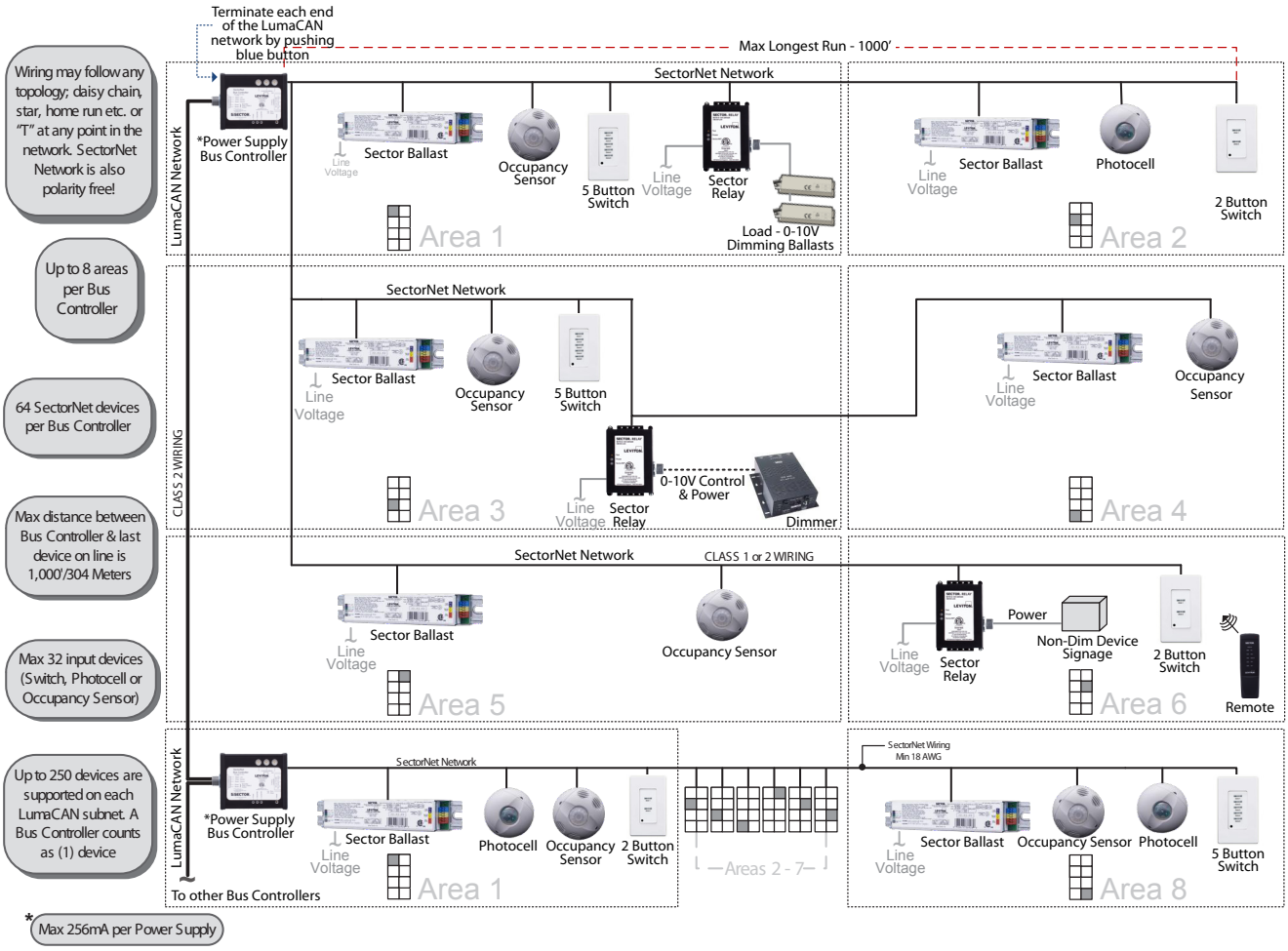
Listings

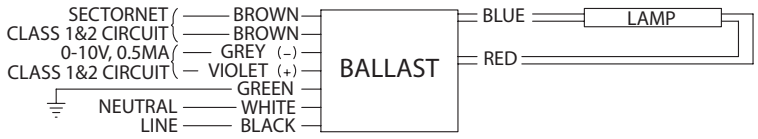
- UL Listed #E339014
- CSA and US-CSA certified
- FCC Part 18, non-consumer specifications (EMI/RFI emissions)
- ANSI C62.41 Category A (transient voltage line protection)
- ANSI C82.11 (performance)
- NEMA 410 Standards for inrush current
- CEE Certified
- Canada Class A RFLD (complied with Canadian ICES-005)

Warranty

- Limited 5-year warranty

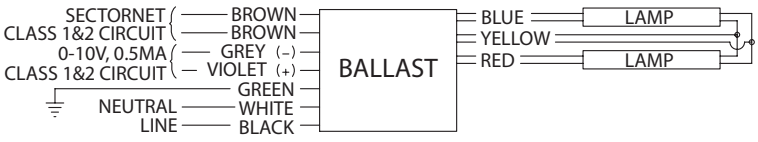
WIRING DIAGRAMS





1 Lamp Ballast Wiring Diagram

Note: Ballast wire lead lengths from ballast to the lamps shall not exceed 7 feet.



2 Lamp Ballast Wiring Diagram

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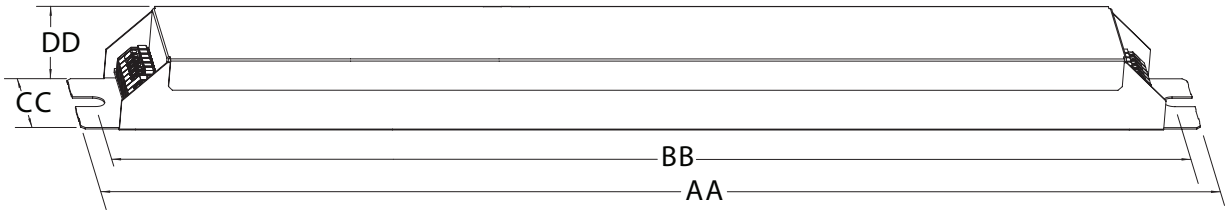
DIMENSIONS



	AA	BB	CC	DD
B Can	16.7" (424 mm)	16.34" (415 mm)	1.20" (30.5 mm)	1.00" (25.4 mm)

ORDERING INFORMATION
LEVITON SECTOR BALLASTS FOR LINEAR AND U-BENT T5 LAMPS

LAMP WATTS	LAMPS PER BALLAST	CASE SIZE	CATALOG NUMBER	INPUT VOLTAGE (VAC)	BALLAST CURRENT (A)	BALLAST FACTOR (BF)	INPUT POWER (W)	BALLAST EFFICACY FACTOR (BEF)
14W (22 in)	1	B	SD1J5-14M	120/277	0.16/0.07	1.00	19	5.26
14W (22 in)	2	B	SD2J5-14M	120/277	0.28/0.12	1.00	34	2.94
21W (34 in)	1	B	SD1J5-21M	120/277	0.21/0.09	1.00	26	3.85
21W (34 in)	2	B	SD2J5-21M	120/277	0.39/0.17	1.00	47	2.13
28W (46 in)	1	B	SD1J5-28M	120/277	0.27/0.12	1.00	33	3.03
28W (46 in)	2	B	SD2J5-28M	120/277	0.54/0.24	1.00	65	1.54
35W (58 in)	1	B	SD1J5-35M	120/277	0.35/0.15	1.00	42	2.38
35W (58 in)	2	B	SD2J5-35M	120/277	0.67/0.29	1.00	81	1.23

Note: B.E.F. (Ballast Efficacy Factor) = Ballast Factor (B.F) * 100/Input Watts (W)

LEVITON SPECIFICATION SUBMITTAL	
JOB NAME:	CATALOG NUMBERS:
JOB NUMBER:	

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