

Sector 7 T5 Ballasts

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



- Fluorescent Dimming
- Daylight Harvesting
- New Construction or Retrofit
- 100% to 1% Dimming
- Start at any Dimmed Level
- Smooth Fade, Flicker-Free



DESCRIPTION

The Leviton line of Sector 7 o-10V fluorescent dimming ballasts is designed to support all high-performance dimming applications. These ballasts can be used for all fluorescent dimming applications. Sector 7 ballasts support full range 100% to 1% dimming from standard o-10V controls.

Leviton's Sector family of products offers immediate cost and energy savings by managing lighting needs and reducing energy consumption in the most efficient and cost effective way possible.

APPLICATIONS

Sector 7 ballasts can conveniently be integrated into existing installations with off-the-shelf fixtures. These ballasts are ideal for use in office buildings, schools, hospitals, medical offices, restaurants, government facilities and any other location that will benefit from the cost savings and energy efficiency of a controlled lighting environment. When combined with Leviton dimming, occupancy sensing, and daylight harvesting controls, they form a complete energy management lighting control solution. Additionally, they may be controlled by other dimmers or controllers designed for sinking style industry-standard ballast control.

FEATURES

- Energy and Cost Savings: enables energy conservation when combined with dimming, daylight harvesting, and demand response controls
- Minimal Installation Time: color-coded easy-insert connectors simplify wiring and minimize installation time
- 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
- Flicker-Free Dimming: smooth fade throughout dimming range of 100% to 1%
- Safe and Stable: automatic restart and shutdown modes enhance safety; brown-out protection provides stable performance
- **Programmed Start Design:** preheats lamp cathodes prior to applying full arc voltage
- Increased Lamp Life: programmed-start operation maximizes lamp life
- 100% Test: Leviton tests the performance of every ballast prior to shipment to assure quality and performance
- 100% Burn-In: Leviton "burns in" every ballast prior to shipment to assure performance and reliability
- Sound Rating: inaudible at 27dB ambient
- Lamp Leveling: ensures all Lamps on the o-10V control circuit are at the same output level

PRODUCT DATA

SPECIFICATIONS

Electrical

- **Voltage:** automatic voltage function, detects operation 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 at full light output and Power Factor > 0.90 throughout the dimming range
- Thermal Protection: Class P inherent thermal protection
- **Distortion:** less than 10% Total Harmonic Distortion throughout the dimming range to maintain power quality
- Ballast Frequency: >42KHz throughout operating mode minimizes risk of interference with infrared remote control systems and provides continuous, flicker-free dimming
- Rating: Class P, Type 1 Outdoor

Dimensions



	AA	ВВ	CC	DD	
A	9.50"	8.90"	1.71"	1.20"	
Can	(241.3 mm)	(226 mm)	(43.4 mm)	(30.5 mm)	
B	16.70"	16.34"	1.20"	1.00"	
Can	(424.2 mm)	(415 mm)	(30.5 mm)	(25.4 mm)	

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)
- NEMA Premium Rating (32W Ballast)
- Sound Rated "A"
- Type 1 Outdoor

Warranty

Limited 5-year warranty

Wiring Diagrams



1 Lamp Ballast Wiring Diagram



ORDERING INFORMATION

LEVITON SECTOR 7 BALLASTS FOR LINEAR AND U-BENT T5 LAMPS

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

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	В	SA1J5-14M	120/277	.16/.07	1.00	19	5.26
14W (22 in)	2	В	SA2J5-14M	120/277	.28/.12	1.00	34	2.94
21W (34 in)	1	В	SA1J5-21M	120/277	.21/.09	1.00	26	3.85
21W (34 in)	2	В	SA2J5-21M	120/277	.39/.17	1.00	47	2.13
28W (46 in)	1	В	SA1J5-28M	120/277	.27/.12	1.00	33	3.03
28W (46 in)	2	В	SA2J5-28M	120/277	.54/24	1.00	65	1.54
35W (58 in)	1	В	SA1J5-35M	120/277	.35/15	1.00	42	2.38
35W (58 in)	2	В	SA2J5-35M	120/277	.67/29	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:				

Leviton Mfg. Co., Inc. Lighting & Energy Solutions

20497 SW Teton Avenue, Tualatin, OR 97062 • 1-800-736-6682 • Fax: 503-404-5594 • Tech Line (6:00AM-4:00PM P.S.T. Mon-Fri): 1-800-959-6004

Leviton Manufacturing Co., Inc. Global Headquarters

201 N. Service Rd. Melville, NY 11747-3138 • Tech Line: 1-800-824-3005 • Fax: 1-800-832-9538

Leviton Manufacturing of Canada, Ltd.

165 Hymus Boulevard, Pointe Claire, Quebec HgR 1Eg • Telephone: 1-800-469-7890 • FAX: 1-800-563-1853

Leviton S. de R.L. de C.V.

Lago Tana 43, Mexico DF, Mexico CP 11290 • Tel. (+52) 55-5082-1040 • FAX: (+52) 5386-1797 • www.leviton.com.mx