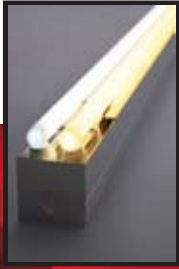


## HIGH-EFFICIENCY DOUBLE-LAMP CATHODE LIGHT STRIP (Model H-CLSD)



Patent 7,293,895  
Patent 6,454,431  
Patent 5,564,818



Beautiful colors from which to choose and the largest palette of white hues available. Ultra-low energy consumption and ultra-long lamp life are no longer mutually exclusive.

Our new high-efficiency double-lamp Cathode Light Strip may be the smartest choice you can make.

Private Residence - San Francisco, CA




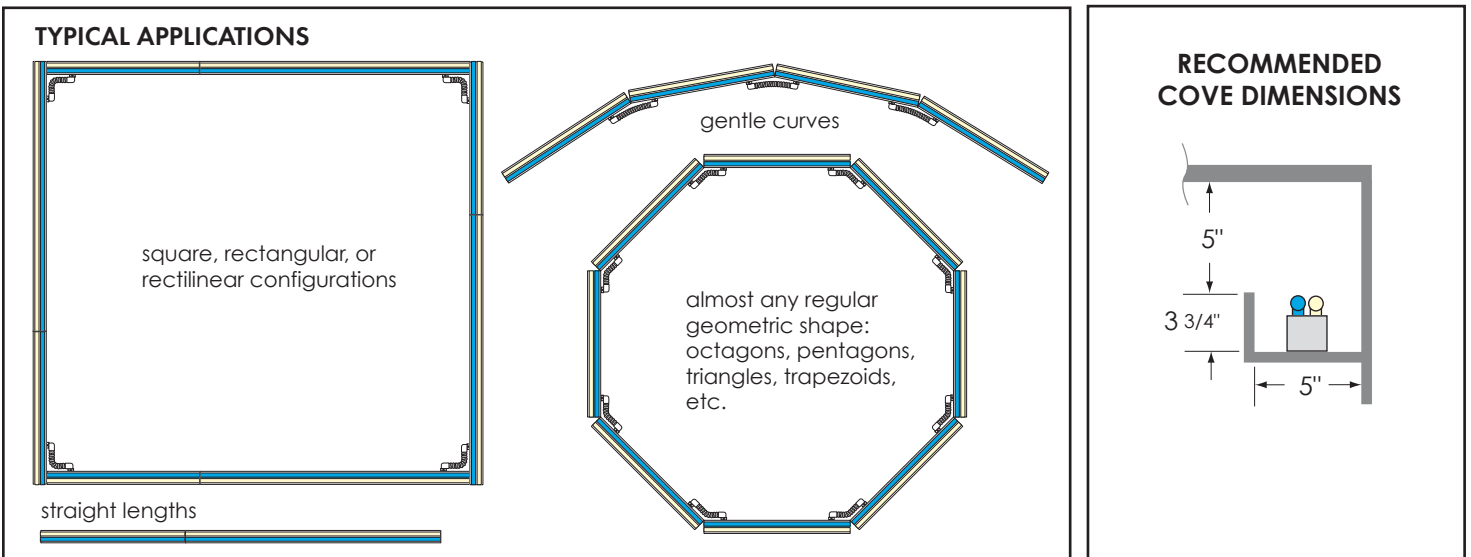
8020 Queenair Drive, Gaithersburg, MD 20879 USA • ph: 301 921 4120 • fax: 301 963 3050  
email: [info@CathodeLightingSystems.com](mailto:info@CathodeLightingSystems.com) • website: [www.CathodeLightingSystems.com](http://www.CathodeLightingSystems.com)











**HIGH-EFFICIENCY DOUBLE-LAMP CATHODE LIGHT STRIP (Model H-CLSD)**

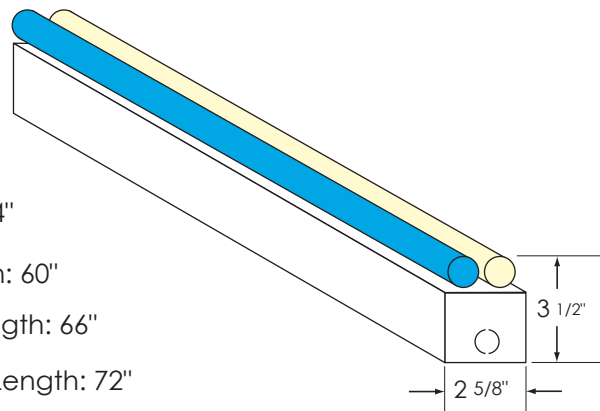
**FEATURES & BENEFITS  
DESIGN & DIMENSIONAL INFORMATION**

**FEATURES & BENEFITS**

- Illumination is seamless from end to end, with no dark spots or socket shadow
- Each lamp within the luminaire is independently dimmable for the highest quality color changing effects
- Luminaires are available in 10 standard sizes, from 3' to 7.5' (in 6" increments)
- Reliable, long-life high color-rendering T6 cold cathode lamps (up to 100,000 hours of life)
- Up to 495 feet of fixtures on one 20-amp circuit @ 277 volts, or 210 feet of fixtures @120 volts
- Lamps snap in and out of luminaires via innovative zero-clearance lamp bases and lampholders
- New electronic ballast technology offers inaudible operation and a power factor >.95
- Low profile - only 3.5" tall with lamp installed
- All luminaires come equipped with integral 1% dimming ballasts, and are compatible with 3-wire fluorescent dimmers
- Uniform dimming regardless of luminaire length combinations
- Wide color selection
- UL-Listed 



- Model H-CLSD-3  Length: 36"
- Model H-CLSD-3.5  Length: 40"
- Model H-CLSD-4  Length: 48"
- Model H-CLSD-4.5  Length: 54"
- Model H-CLSD-5  Length: 60"
- Model H-CLSD-5.5  Length: 66"
- Model H-CLSD-6  Length: 72"
- Model H-CLSD-6.5  Length: 78"
- Model H-CLSD-7  Length: 84"
- Model H-CLSD-7.5  Length: 90"



**HIGH-EFFICIENCY DOUBLE-LAMP CATHODE LIGHT STRIP (Model H-CLSD)**

**LAMP COLORS**

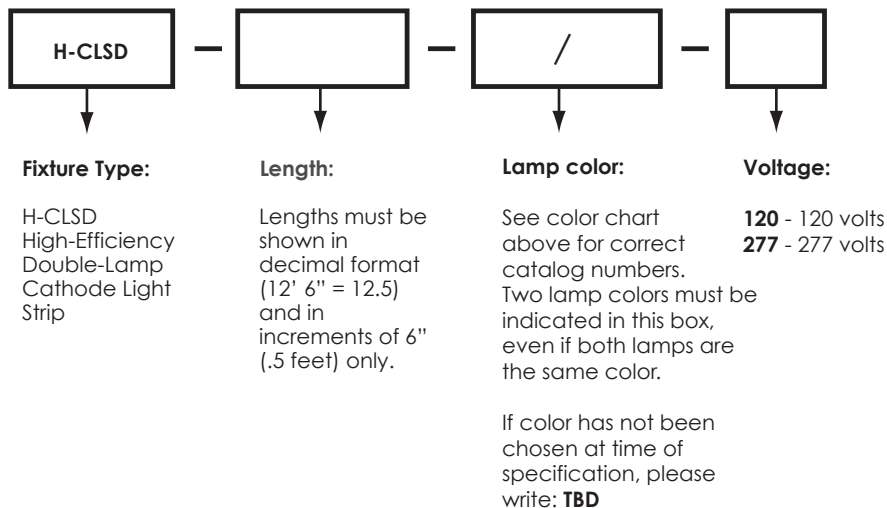
**WHITE LAMPS:** All whites are triphosphor with a CRI of 92,  
**NOTE: LUMEN VALUES ARE FOR EACH INDIVIDUAL LAMP (TWO LAMPS PER LUMINAIRE)**

Cat. No.	Shade of White	Lumens per foot	Efficacy
28TC	Incandescent - 2800°K	257	77.2 lumens/watt
30TC	Warm white - 3000°K	253	76.2 lumens/watt
35TC	Soft white - 3500°K	260	78.2 lumens/watt
42TC	Cool white - 4200°K	250	75.3 lumens/watt
50TC	Ice white - 5000°K	246	73.2 lumens/watt
65TC	Daylight - 6500°K	250	75.4 lumens/watt

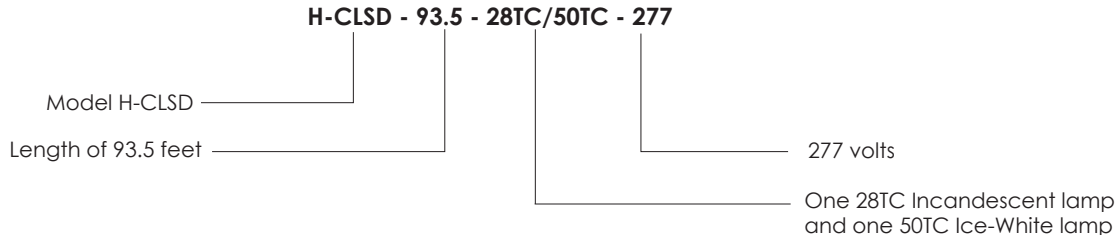
- COLORED LAMPS:**
- Pink White (PW)
  - Hot Pink (HP)
  - Red (RD)
  - Lavender (LV)
  - Purple (PR)
  - Sky Blue (SB)
  - Deep Blue (DB)
  - Turquoise (TQ)
  - Aquamarine (AQ)
  - Standard Green (GR)
  - Bright Green (BG)
  - Gold (GD)
  - Canary Yellow (CY)
  - Orange (OR)
  - Amber (AM)

Photometric information: All photometric values provided by LTL (Luminaire Testing Laboratories, Allentown, PA) .

**ORDERING INFORMATION**



Example: One straight light cover, 93.5' in length. Lamp colors are 28TC (Incandescent 2800°K) and 50TC (Ice White 5000°K). Luminaires will operate at 277 volts.



**HIGH EFFICIENCY DOUBLE-LAMP CATHODE LIGHT STRIP (Model H-CLSD)**

**ELECTRICAL & SPECIFICATION INFORMATION**

**ELECTRICAL INFORMATION**

Ballast type	Primary voltage	Primary amps / VA	Watts per foot*	Dimming protocol	Maximum luminaires per 20-amp circuit*	Maximum lamp footage per 20-amp circuit*
Electronic	120 volts 50/60 Hz	.56 amps / 67 VA	9	3-wire fluorescent	28 @ 120 volts	210 feet
Electronic	277 volts 50/60 Hz	.24 amps / 67 VA	9	3-wire fluorescent	66 @ 277 volts	495 feet

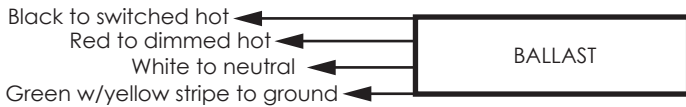
\*Values are based on fixture lengths at 7'6". Actual values may vary dependent upon the selection of luminaire lengths.

**Primary Wiring:** Branch circuit wiring must contain three (3) conductors + ground in order to utilize dimming feature.

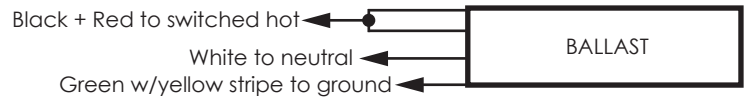
**Branch circuit requirements:** H-CLSD luminaires must be powered by a dedicated circuit only. Maximum breaker size is 20 amps (16-amp maximum operating load).

**DIMMING:** Luminaires are dimmable utilizing 3-wire fluorescent dimmers. Lutron is preferred.

Ballast wiring diagram for dimming operation (note: each luminaire contains two ballasts)



Ballast wiring diagram for switched "on/off" operation (note: each luminaire contains two ballasts)



**SPECIFICATIONS:**

**Luminaire:** Shall be Cathode Lighting Systems model H-CLSD (High-Efficiency Double-Lamp Cathode Light Strip), and shall be available in ten (10) standardized straight lengths from 3 feet to 7.5 feet long. Luminaires will accommodate two (2) independently dimmable lamps. Luminaires shall provide a continuous, uninterrupted line of light when installed as instructed. Luminaires shall be pre-assembled, satin-anodized .060" aluminum with a snap-fit cover and two (2) integral, dimmable electronic ballasts.

**Lamps:** Shall be 100,000-hour T6 cold-cathode fluorescent, color as specified. Lamps shall be provided with single-pin bases for zero-clearance snap-in installation and removal from lampholders. Lamps that are hard-wired to the power supply are not acceptable alternatives. Lamps shall be manufactured with butt-sealed ends to provide complete illumination at each lamp end, and shall have provisions to be locked into place, utilizing the luminaire's lamp-locking clips. Each lamp shall produce 253 lumens per foot (30TC Warm White Triphosphor) and manufacturer shall provide independent test lab reports to substantiate.

**Integral Ballasts:** Shall be noiseless, electronic 990-volt, high-output, instant-start cold cathode, class P thermally protected, and shall automatically de-energize upon removal of lamps from the luminaire. Ballast power factor shall be >.95

**Dimming:** Each lamp shall be independently dimmable via a 3-wire fluorescent dimming system. Low-end lamp performance shall be 1%. Lutron dimming is recommended.

**Approvals:** Luminaires shall be UL and cUL-listed under UL category: IEUZ Fluorescent surface-mounted luminaires.

**Manufacturer:** Shall be Cathode Lighting Systems Inc., Gaithersburg, MD - USA (800) 551-5012.

Website: [www.CathodeLightingSystems.com](http://www.CathodeLightingSystems.com)