

EXPORT SLIM CATHODE LIGHT STRIP

(Model CLS-Slim-EX & HCLS-Slim-EX)

 **US LISTED** Patent 6,454,431



Model HCLS-Slim-EX

Phenomenally energy efficient with incredibly long life, our new CLS-Slim-EX series of cold cathode fittings are beautifully made, discreetly dimensioned and perfect for indirect coves, direct surface mounting, or as hanging pendant dants. The most beautiful seamless cold cathode fitting in the world, manufactured and engineered to be as easy to specify and install as a fluorescent batten. Available in seven standard metric lengths and custom sizes for exact fit applications.

FEATURES & BENEFITS

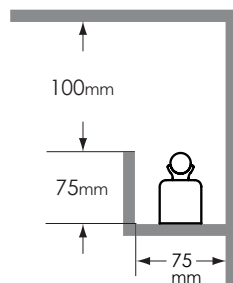
- Illumination is seamless from end to end, with no dark spots or socket shadows
- Fittings are available in 7 standard sizes, from 750mm to 2250mm in 250mm increments
- Custom lengths for *exact fit* applications (please contact factory)
- The smallest profile of any specification-grade modular cold cathode fitting in the world - only 41mm wide and 60mm tall with lamp installed
- Reliable, ultra long-life, high color-rendering T6 cold cathode lamps (up to 100,000 hours of life)
- Up to 211 meters of fittings on one 20-amp / 230 volt circuit
- Lamps easily snap in and out via patented zero-clearance lamp bases and lampholders, and lock securely in place
- Contractor friendly and beautifully engineered, unlike traditional rudimentary cold cathode systems, no twisting of wires, insulating rubber boot installation or lamp stanchion fixing is necessary to install or replace a lamp
- Dimmable 1% integral electronic ballasts offer inaudible operation and a power factor >.95
- Outstanding dimming performance using 2-wire trailing edge dimmers
- Phenomenal color selection, including 11 color-stable white hues
- Lamps are machine-made in our automated factory - the only one of its type in the world
- Available in standard output (up to 1614 lumens per meter / CLS-Slim-EX) or reduced output high efficiency (up to 1076 lumens per meter / HCLS-Slim-EX)



TYPICAL APPLICATIONS

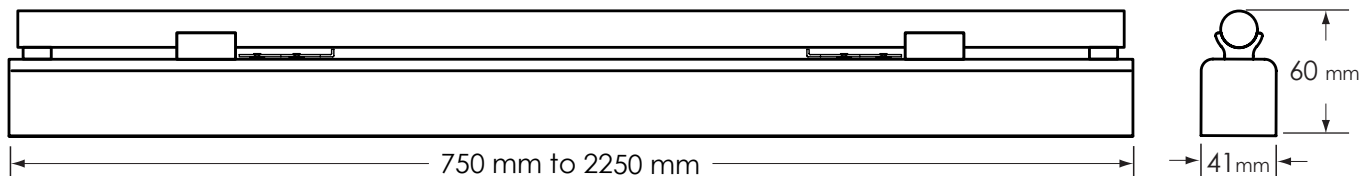
Cove
Coffer
Vertical Sconce
Hanging Pendant
Suspended Row

RECOMMENDED COVE DIMENSIONS



DIMENSIONAL INFORMATION

CLS-Slim-EX fittings are available in 7 standard lengths: **.75 meter, 1 meter, 1.25 meter, 1.5 meter, 1.75 meter, 2 meter and 2.25 meter** (custom lengths are readily available for *exact fit* applications) and are available in satin-anodized aluminum or powder-coated white. Other colors are available on special order.



LAMP COLORS, LUMENS & EFFICACIES

WHITE LAMPS: All whites are triphosphor with a CRI of 92					Efficacy
Cat. No.	Description	CLS-Slim-EX Lum./Meter	HCLS-Slim-EX Lum./Meter		
19TC	Candelight - 1900°K	941	626		77.2 lumens/watt
23TC	Golden White - 2300°K	1378	918		77.2 lumens/watt
24TC	Sunrise - 2400°K	1528	1020		77.2 lumens/watt
25TC	Incandescent - 2500°K	1486	991		77.2 lumens/watt
27TC	Warmtone - 2700°K	1335	889		77.2 lumens/watt
29TC	Warm White - 2900°K	1542	1027		77.2 lumens/watt
30TC	Warmlight - 3000°K	1574	1050		76.2 lumens/watt
35TC	Soft white - 3500°K	1614	1076		78.2 lumens/watt
42TC	Satin white - 4200°K	1561	1040		75.3 lumens/watt
63TC	Ice white - 6300°K	1515	1010		73.2 lumens/watt
83TC	Daylight - 8300°K	1502	1000		75.4 lumens/watt

COLORED LAMPS:

Pink White (PW)
Deep Blue (DB)
Sky Blue (SB)
Aqua (AQ)
Turquoise (TQ)
Green (GR)
Bright Green (BG)
Gold (GD)
Yellow (YL)
Salmon Pink (SP)
Purple (PR)
Hot Pink (HP)
Red (RD)
Orange (OR)

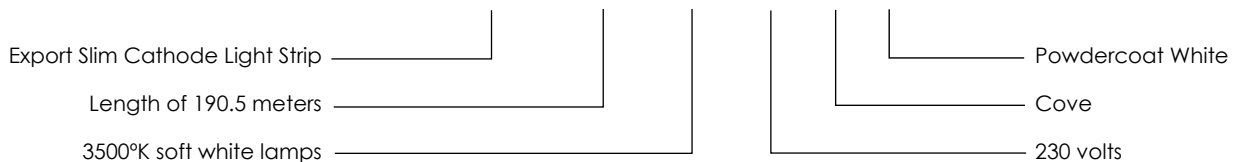
Photometric information: All photometric values provided by LTL (Luminaire Testing Laboratories, Allentown, PA and Cathode Lighting Systems Inc. USA).

ORDERING INFORMATION

Model:	Length:	Lamp color:	Voltage:	Mounting:	Finish Color:
CLS-Slim-EX Export Slim Cathode Light Strip (standard light output) HCLS-Slim-EX Export High-efficiency Slim Cathode Light Strip (reduced light output)	Lengths are expressed in meters to the nearest .25 meter.	See color chart above for correct catalog numbers If color has not been chosen at time of specification, please write: TBD	230 - 230 volts	C - Cove V - Vertical Sconce P - Hanging Pendant	SA - Satin Anodized (standard) WH - Powdercoat White BL - Powdercoat Black

Example: One indirect cove 190.5 meters in length. Lamp color is 3500°K soft white. Fittings will operate at 230 volts.

CLS-Slim-EX - 190.5 - 35TC - 230 - C - WH



ELECTRICAL INFORMATION

Model	Voltage	Primary Amps Per Fitting	Dimming Method	Watts per Meter	Maximum Run Length*
CLS-Slim-EX	230 volts	.20	Trailing-Edge	18 watts per meter	180 meters
HCLS-Slim-EX	230 volts	.17	Trailing-Edge	14.6 watts per meter	211 meters

*Values are based on all fitting lengths at 2.25 meters operating on a 20-amp / 230 volt circuit loaded at 80% of the maximum ampacity (16 amps). Actual values may vary depending on the selection of fitting lengths. CLS-Slim-EX fittings shall be powered by a dedicated circuit only. Circuit shall be provided with over-voltage and surge protection.

DIMMING

Fittings are dimmable utilizing 2-wire trailing-edge dimmers.

SPECIFICATIONS

Fitting: Shall be Cathode Lighting Systems model CLS-Slim-EX (Export Slim Cathode Light Strip) or HCLS-Slim-EX (Export High-Efficiency Slim Cathode Light Strip), and shall be available in seven (7) standardized straight lengths from .75 to 2.25 meters in length. Special-order custom sizes shall be as indicated by designer. Fittings shall provide a continuous, uninterrupted line of light when installed as instructed. Fittings shall be pre-assembled, satin-anodized 1.25 mm aluminum (or powder-coated color) with a snap-fit cover and one (1) integral, dimmable electronic ballast.

Lamps: Shall be 100,000-hour (HCLS-Slim-EX) or 75,000 hour (CLS-Slim-EX) 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 ballast 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 fitting's lamp-locking clips. Manufacturer shall provide independent test lab reports to substantiate lumen output.


























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 fitting. Ballast power factor shall be >.95.

Dimming: Fittings shall be independently dimmable via trailing-edge 2-wire dimmers, and shall dim to 1%.

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

Manufacturer: Shall be Cathode Lighting Systems Inc., Gaithersburg, MD - USA 001-301-921-4120
Website: www.CathodeLightingSystems.com

Lamp Color & Lumen Output Information

	Lamp Color	Kelvin Temperature	Catalog Number	Lumens per Meter	
				CLS-Slim-EX	HCLS-Slim-EX
	Candlelight	1900° K	19TC	941	626
	Golden White	2300° K	23TC	1378	918
	Sunrise	2400° K	24TC	1528	1020
	Incandescent	2500° K	25TC	1486	991
	Warmtone	2700° K	27TC	1335	889
	Warm White	2900° K	29TC	1542	1027
	Warmlight	3000° K	30TC	1574	1050
	Soft White	3500° K	35TC	1614	1076
	Satin White	4200° K	42TC	1561	1040
	Ice White	6300° K	63TC	1515	1010
	Day Light	8300° K	83TC	1502	1000
	Pink White	N/A	PW	991	659
	Deep Blue	N/A	DB	1151	768
	Sky Blue	N/A	SB	1404	935
	Aqua	N/A	AQ	1319	879
	Turquoise	N/A	TQ	1624	1082
	Green	N/A	GR	1571	1046
	Bright Green	N/A	BG	1650	1099
	Gold	N/A	GD	833	554
	Yellow	N/A	YL	895	597
	Salmon Pink	N/A	SP	915	610
	Purple	N/A	PR	823	548
	Hot Pink	N/A	HP	905	604
	Red	N/A	RD	394	262
	Orange	N/A	OR	659	440

Photometric information: All photometric values provided by LTL (Luminaire Testing Laboratories, Allentown, PA) and Cathode Lighting Systems Incorporated, USA.