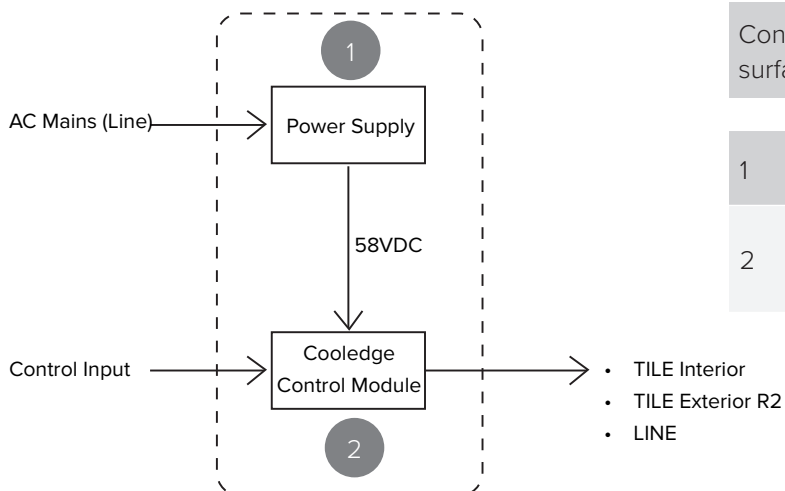




# COOLEEDGE cUL LISTED STATIC COLOUR TEMPERATURE POWER & CONTROL (58V) SPECIFICATIONS

PROJECT		REFERENCE TYPE	
SPECIFIED BY		QUANTITY	
DATE		NOTE	For Luminous Surfaces

## SYSTEM OVERVIEW



Control on the scale of nature enables large luminous surfaces using industry standard protocols.

1	Power Supply: converts AC mains (line) power to safe low voltage 58V power
2	Cooledge Control Module: receives control input signals to dim Cooledge Lighting Systems. Output is max. 90W per channel

## GENERAL

Operating Temp.	-20 to 55°C (-4 to 131°F)
Storage Temp.	-40 to 70°C (-40 to 158°F)
Relative Humidity	90% max (non-condensing)
Operating Voltage	Nominal 58VDC

## CERTIFICATIONS



**RoHS**



Contact Cooledge for ordering information for JA8 compliant models.

## WARRANTY



5 Year Limited Warranty:  
Parts and workmanship.

## FEATURES

- Compatible with a full range of industry standard control protocols from simple analog (0/1-10V), to digital (DALI/DMX), and wireless (Casambi) options
- Up to four 90W channels of power enables larger luminous surfaces while reducing the number of line voltage connections required
- Simple and economic control for dynamic illumination that includes deep dimming
- Test mode available for on-site troubleshooting.

Cooledge Lighting Inc.  
110-13551 Commerce Parkway  
Richmond, BC V6V 2L1 Canada

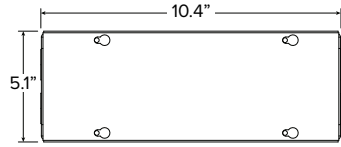
O +1 604 273 2665  
F +1 604 273 2660  
T +1 844 455 4448  
W cooledgelighting.com

Cooledge Lighting reserves the right to change materials or modify the design of its product without notification as part of the company's continuing product improvement program.

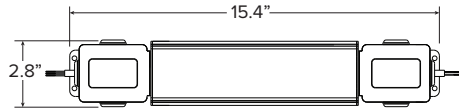
# COOLEEDGE cUL LISTED STATIC COLOUR TEMPERATURE POWER & CONTROL (58V) SPECIFICATIONS

## 1 POWER SUPPLIES AND LED DRIVERS = 1

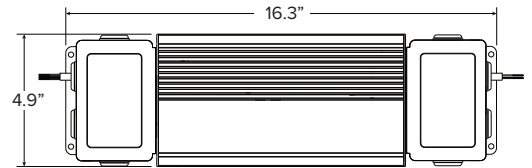
**Purpose:** Converts AC mains (line) power to nominal 58VDC power.



90W LED Driver



200W Power Supply



400W Power Supply

## SPECIFICATIONS

	90W LED Driver	200W Power Supply	400W Power Supply
TILE Exterior R2	No	Yes	Yes
IP Rating	IP20	IP66	IP66
Dimensions (in)	10.4 x 5.1 x 3.3	15.4 x 2.8 x 1.5	16.3 x 4.9 x 1.7
Maximum Output Power (W)	90	200	400
Output Voltage (VDC)	58	58	57
Input Voltage Range (VAC)	Nom. 120-277	Nom. 120-277	Nom. 120-277
Efficiency (% at full load – typ.)	93 (typ)	93 (typ)	95 (277V)
Power Factor (full load)	0.98	0.98 (120V), 0.95 (277V)	0.98 (120V), 0.95 (277V)
Total Harmonic Distortion (%)	< 20 (full load)	≤ 20 (>50% load)	≤ 20 (>40% load)
Start-up Time (sec)	1.0	0.5	0.5
Max. Inrush Current	60A (per NEMA 410)	75A (per NEMA 410)	35A (per NEMA 410)
Dimming Frequency (Hz)	3000	Not Applicable	Not Applicable
Dimming Range (%)	0.05 - 100	Not Applicable	Not Applicable
Certification	UL Listed	UL Listed	UL Listed
Rated Lifetime (hr)	70,000	62,000	62,000
Weight	6.5 lb / 2952g	3.39lbs / 1538g	6.85lbs / 3107g

## HOW TO ORDER

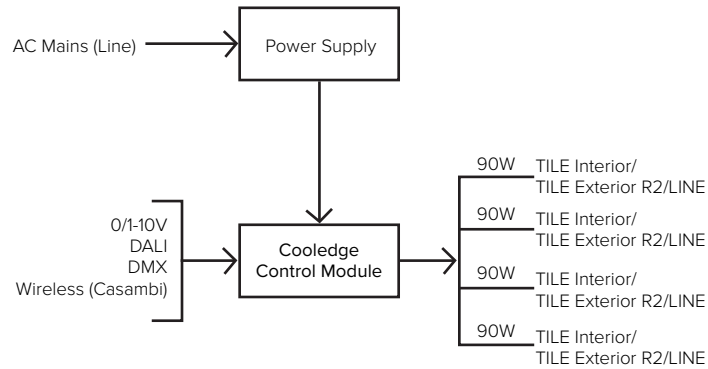
Output Power	Ordering Code	Description
90W	EPSS-090-1CH-58V-DD	Enclosed LED Driver, 0.05% Deep Dimming, 90W, 1 Channel, 58V, 0-10V Input, 3000Hz
200W	EPSS-200-58V	Meanwell (configured for Cooledge) 200W Power Supply, 58V (UL Listed) with integrated IP66 wiring enclosure
	EPSS-200-58V-EXT*	Meanwell (configured for Cooledge) 200W Power Supply, 58V (UL Listed) with integrated IP66 wiring enclosure
400W	EPSS-400-58V	Meanwell (configured for Cooledge) 400W Power Supply, 58V (UL Listed) with integrated IP66 wiring enclosure
	EPSS-400-58V-EXT*	Meanwell (configured for Cooledge) 400W Power Supply, 58V (UL Listed) with integrated IP66 wiring enclosure

\*Suitable for exterior applications. Includes two conduit adapters kits ½" Male BSPP x ½" Female NPT for the wiring enclosures

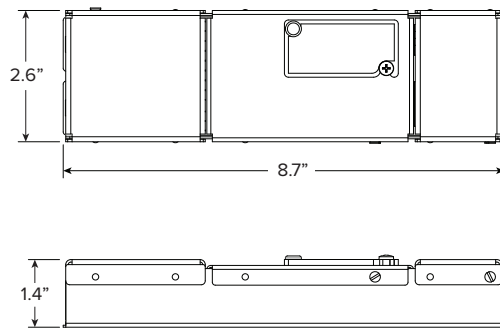
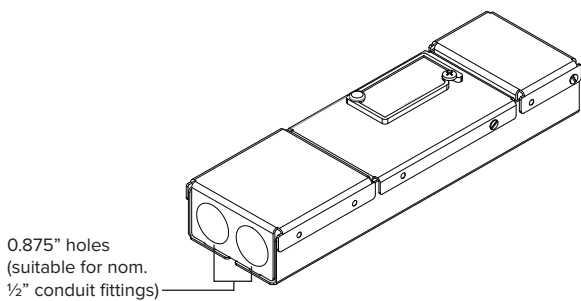
# COOLEDGE cUL LISTED STATIC COLOUR TEMPERATURE POWER & CONTROL (58V) SPECIFICATIONS

## 2 COOLEDGE CONTROL MODULE: GENERAL = 2

**Purpose:** Cooledge Control Modules perform two functions: 1) convert a single incoming DC power source to multiple Class 2 output (<100W) channels; and 2) convert incoming control signals to dimming output to operate Cooledge TILE and LINE products.



### Static Color Temperature (SCT)



## SPECIFICATIONS

Dimensions (in)	8.7 x 2.6 x 1.4
Output Power (W per channel)	90 (Class 2); up to 4CH
Input Power (W)	Up to 400 (Class 1)
Circuit Protection	Overcurrent, Overvoltage, Reverse Polarity, Short Circuit
Dimming Frequency (Hz)	3950
Dimming Range (%)	0.05 - 100
Standalone Test Mode	Available
Maximum Control Current (Source)	0.5 mA
Max. Wire Size	12 AWG
Rated Lifetime (hr)	70,000
EMI	FCC Part 15, Class B
Location	Indoor; Dry locations. Outdoor use requires suitable enclosure*
Weight	0.47 lbs

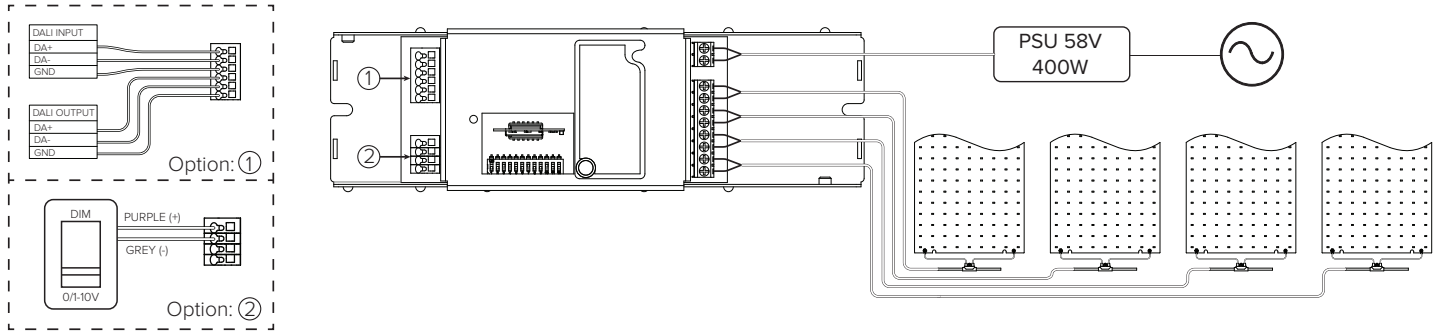
\*For exterior applications, Cooledge Control Modules must be mounted within an appropriate IP65 or higher enclosure is 14.2" L x 6.3" W X 3.6" H. Please contact Cooledge Lighting for recommendations.

# COOLEdge cUL LISTED STATIC COLOUR TEMPERATURE POWER & CONTROL (58V) SPECIFICATIONS

## 3 COOLEdge CONTROL MODULES: DALI AND 0-10V

Control Modules identified as “DALI” have dual protocol capability:

1. if the DALI input is used the module will operate based on incoming DALI control signals and each output channel can be controlled independently.
2. if 0-10V input is used, the module will operate based on incoming 0-10V signals and all output channels will be controlled by this input.



Static Color Temperature (SCT)

## HOW TO ORDER

Input Control Protocol	Ordering Code	Description
0-10V & DALI	CTR-SCT-DAL-58V	400W (max.) Control Module, DALI/0-10V, 58V, Single Channel x 4, 0.05% Dimming

### NOTES:

DALI polarity free, opto-isolated interface

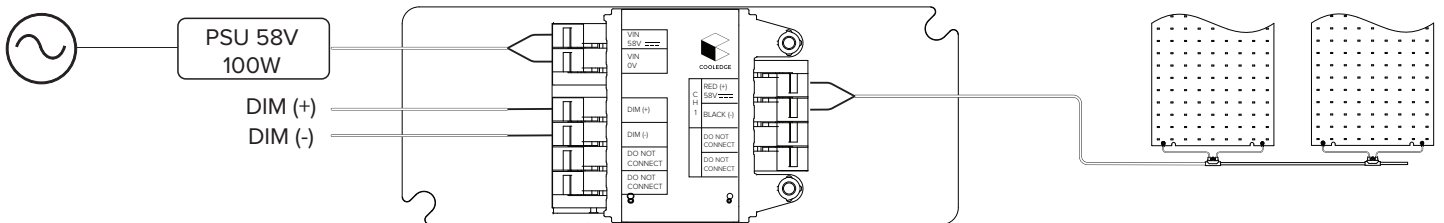
DALI 1 compatible:

IEC 62386-101:2014 (Digital Addressable Lighting Interface – Part 101: General Requirements – System Components)

IEC 62386-102:2014 (Digital Addressable Lighting Interface – Part 102: General Requirements – Control Gear)

IEC 62386 – 207:2009 (Digital Addressable Lighting Interface – Part 207: Particular Requirements for Control Gear – LED Modules (Device Type 6))

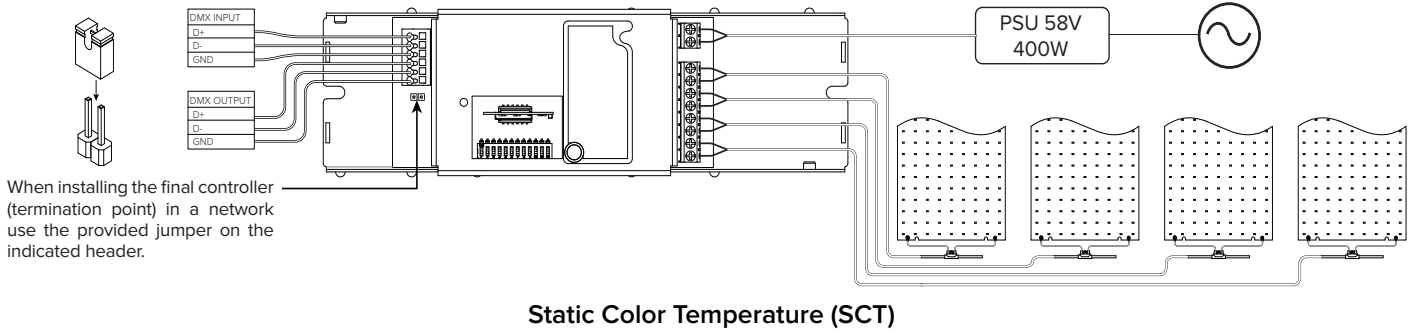
## COOLEdge CONTROL MODULE - 90W LED DRIVER: 0-10V ONLY



# COOLEGE cUL LISTED STATIC COLOUR TEMPERATURE POWER & CONTROL (58V) SPECIFICATIONS

## 4 COOLEGE CONTROL MODULES: DMX

Control Modules identified as “DMX” operate on control signals received from a DMX controller (16-bit) and each output channel can be controlled independently.



## HOW TO ORDER

Input Control Protocol	Ordering Code	Description
DMX	CTR-SCT-DMX-58V	400W (max.) Control Module, DMX, 58V, Single Channel x 4, 0.105% Dimming

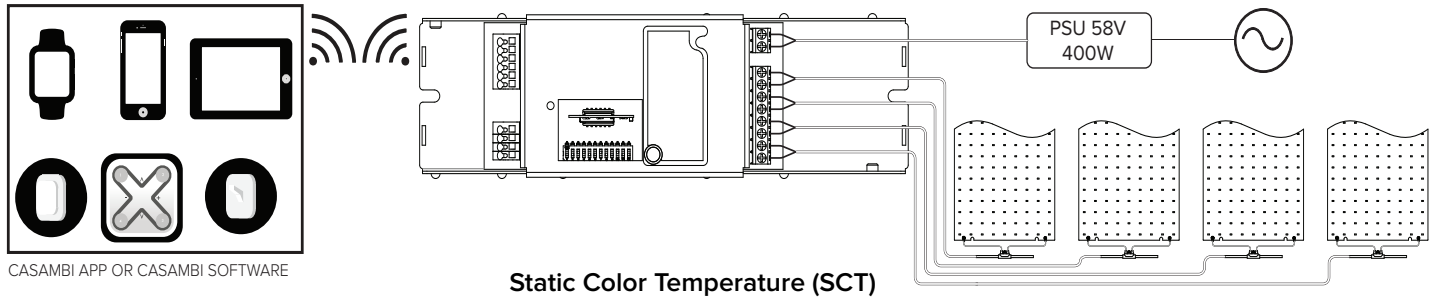
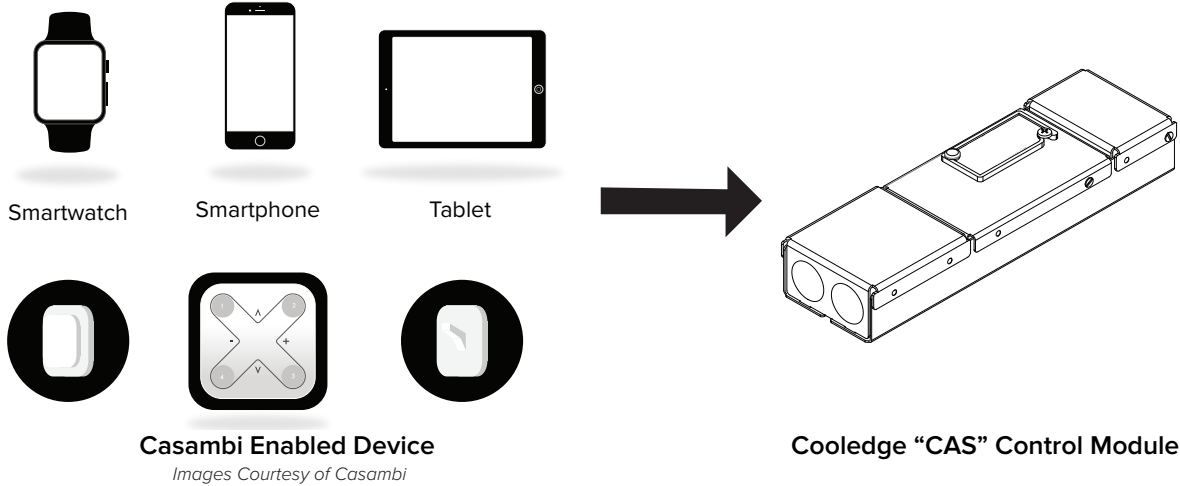
### NOTES:

Compliant with USITT DMX512-A (E1.11-2008 (R2013))

# COOLEGE cUL LISTED STATIC COLOUR TEMPERATURE POWER & CONTROL (58V) SPECIFICATIONS

## 5 COOLEGE CONTROL MODULES: WIRELESS (CASAMBI)

Control Modules identified as “CAS” operate on control signals received from a Casambi (Bluetooth Low Energy wireless protocol) enabled device including a wireless switch, smartphone or tablet.



### HOW TO ORDER

Input Control Protocol	Ordering Code	Description
Wireless (Casambi)	CTR-SCT-CAS-58V	400W (max.) Control Module, Casambi wireless, 58V, Single Channel x 4, 0.05% Dimming

Wireless range may be affected by mounting method, location and weather conditions. Cooledge recommends evaluation of wireless functionality by application.