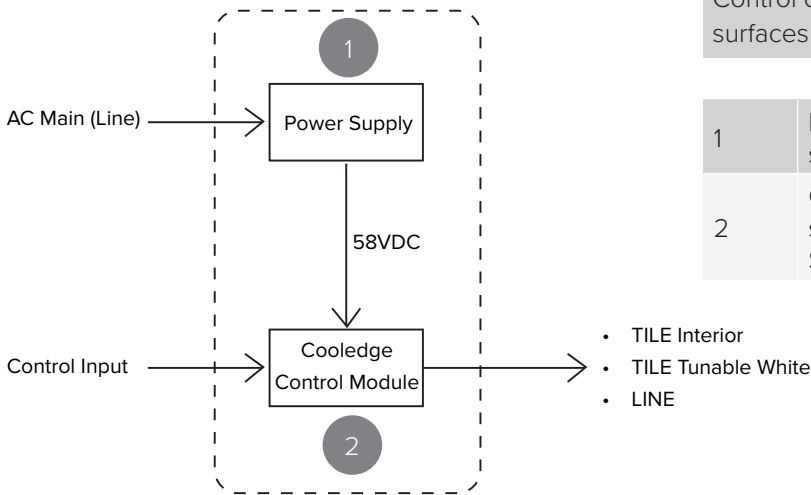


COOLEEDGE™

# COOLEEDGE CE COMPLIANT 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 and/or tune Cooledge Lighting Systems. Output is max. 90W per channel

## GENERAL

Location	Indoor, dry location only
Operating Temp.	0-50°C (32-122°F)
Storage Temp.	-40 - +80°C (-40 - +176°F)
Relative Humidity	90% max (non-condensing)
Operating Voltage	Nominal 58VDC

## CERTIFICATIONS



## WARRANTY



5 Year Limited Warranty: Parts and workmanship when used with a Cooledge approved power supply.

## FEATURES

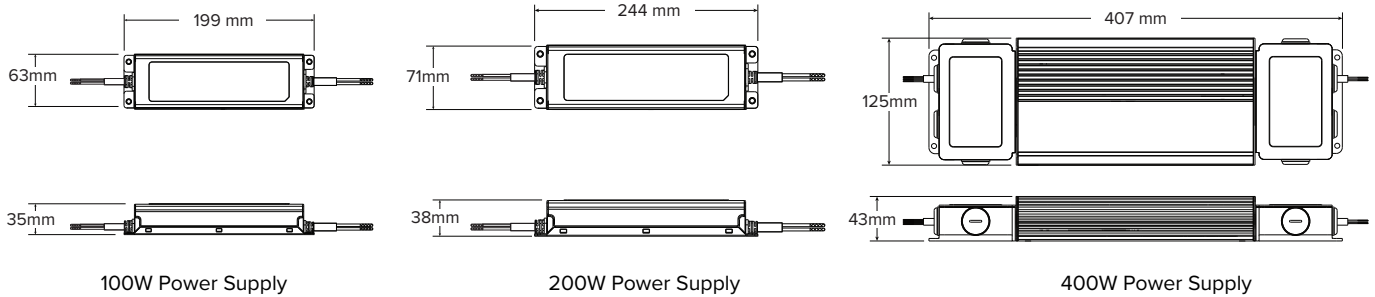
- Compatible with a full range of industry standard control protocols from simple analog (0/1-10V), to digital (DALI/DMX), and wireless (Casambi) options
- Up to 4 @ 90W channels of power enables larger luminous surfaces while reducing the number of line voltage connections required
- Simple and economic control for dynamic illumination that includes deep dimming and tunable CCT
- Incorporates Cooledge’s proprietary “C-Tune” technology that significantly increases the affordability of tunable CCT
- Test mode available for on-site troubleshooting

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.

# COOLEdge CE COMPLIANT POWER & CONTROL (58V) SPECIFICATIONS

## 1 POWER SUPPLIES = 1

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



## SPECIFICATIONS

	100W	200W	400W
Dimensions (mm)	199 x 63 x 35	244 x 71 x 38	407 x 124 x 43
Maximum Output Power (W)	100	200	400
Output Voltage (VDC)	58	58	57
Input Voltage Range (VAC)	Nom. 220-277	Nom. 220-277	Nom. 120-277
Efficiency (% at full load – typ.)	91	93.5 (typ)	95 (277V)
Power Factor (full load)	0.95	0.98 (120V)	0.98 (120V), 0.95 (277V)
Total Harmonic Distortion (%)	< 10 (full load)	≤ 20 (>50% load)	≤ 20 (>40% load)
Start-up Time (sec)	0.85 (full load)	0.5	0.5
Max. Inrush Current	60A	75A	35A
Certification	CE Compliant	CE Compliant	CE Compliant
Rated Lifetime (hr)	70,000	62,000	62,000
Weight	757g	1116g	3107g

## HOW TO ORDER

Output Power	Ordering Code	Description
100W	PSS-100-58V	Meanwell (configured for Cooledge) 100W Power Supply, 58V, (CE compliant)
200W	PSS-200-58V	Meanwell (configured for Cooledge) 200W Power Supply, 58V (CE Compliant)
400W	EPSS-400-58V	Meanwell (configured for Cooledge) 400W Power Supply, 58V (CE Compliant) with integrated wiring enclosure

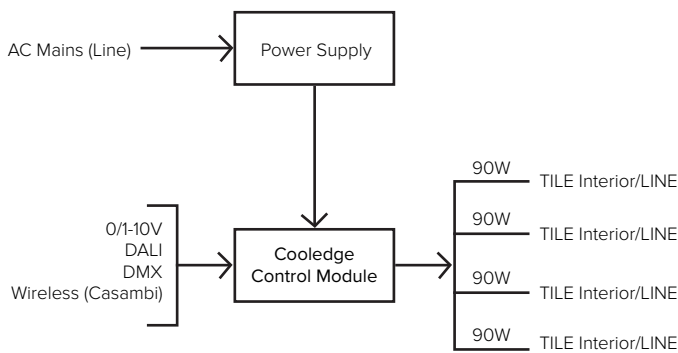
# COOLEGE CE COMPLIANT POWER & CONTROL (58V) SPECIFICATIONS

## 2 COOLEGE CONTROL MODULE: GENERAL = 2

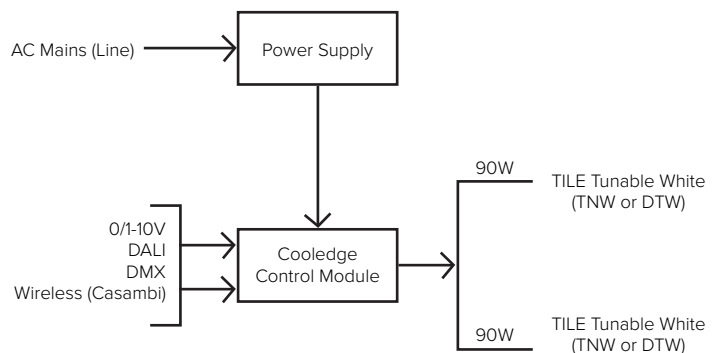
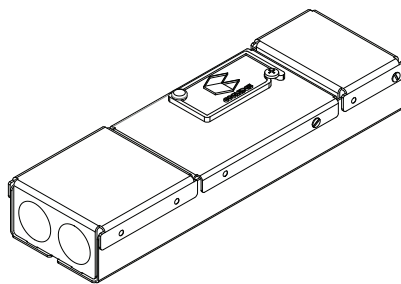
**Purpose:** Cooledge Control Modules perform two functions: 1) convert a single incoming DC power source to multiple Class 2 output (<100W) channels; and 2) convert incoming control signals to dimming and/or CCT tuning output to operate Cooledge TILE and LINE products.

There are 3 types of Control Modules depending upon the TILE/LINE product to be controlled:

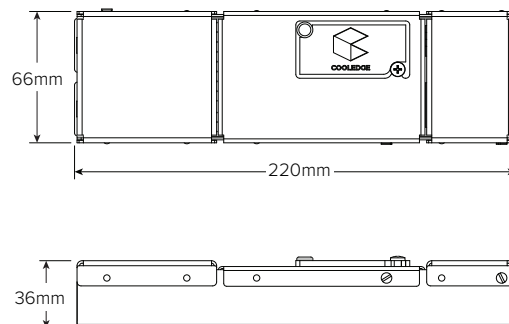
- **SCT** = Static Color Temperature > SCT Control Modules are used for dimming only with TILE Interior or LINE products.
- **TNW** = Tunable White > TNW Control Modules are used to select CCT and dim TILE Tunable White when used for constant lumen output across all CCTs in the range.
- **DTW** = Dim-to-Warm > DTW Control Modules are used to select a CCT + Dim combination when used with the dim-to-warm TILE Tunable White product.



**Static Color Temperature (SCT)**



**Tunable White (TNW) & Dim-to-Warm (DTW)**



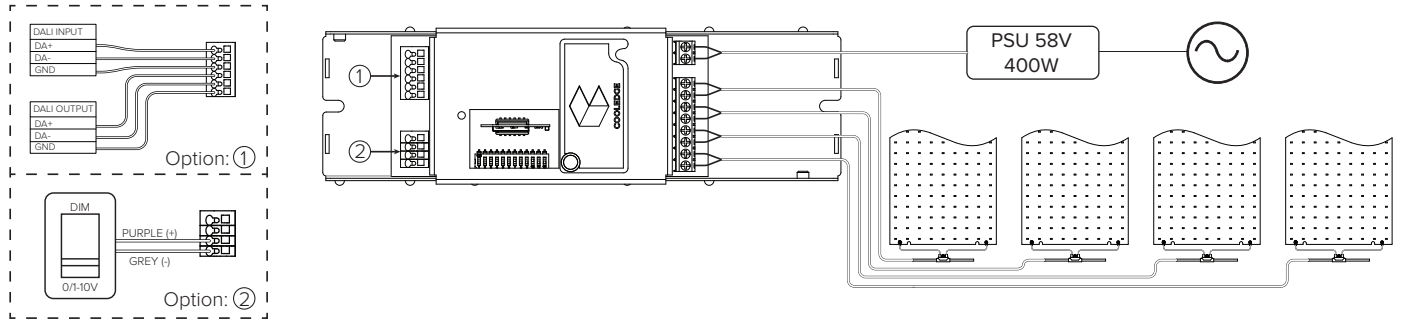
## SPECIFICATIONS

Dimensions (mm)	220 x 66 x 36
Output Power (W per channel)	90: SCT = up to 4CH; TNW/DTW = up to 2CH
Circuit Protection	Overcurrent, Overvoltage, Reverse Polarity, Short Circuit
Dimming Frequency (Hz)	3950
Dimming Range (%)	.05 - 100 (SCT, DTW); 1 - 100 (TNW)
Standalone Test Mode	Available
Maximum Control Current (Source)	0.5 mA
Max. Wire Size	3.3mm <sup>2</sup>
Rated Lifetime (hr)	70,000
Weight	213g

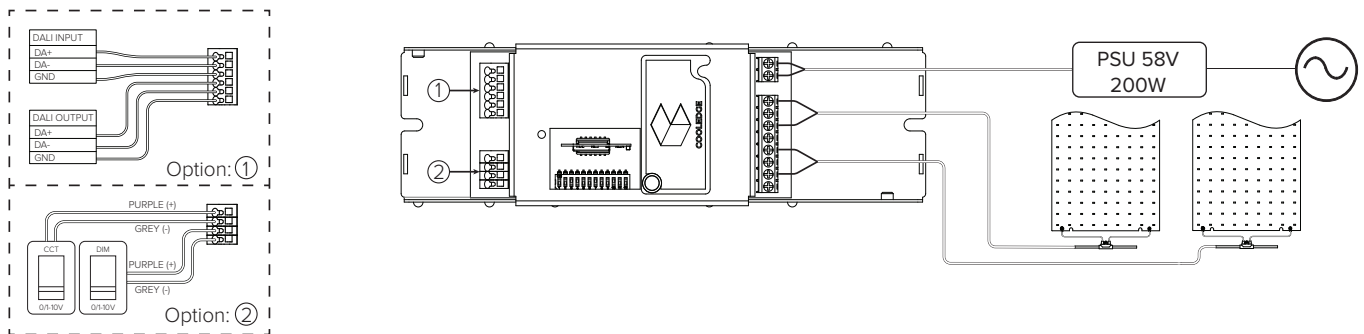
## 3 COOLEdge CONTROL MODULES: DALI AND 0-10V

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)**



**Tunable White (TNW) & Dim-to-Warm (DTW)**

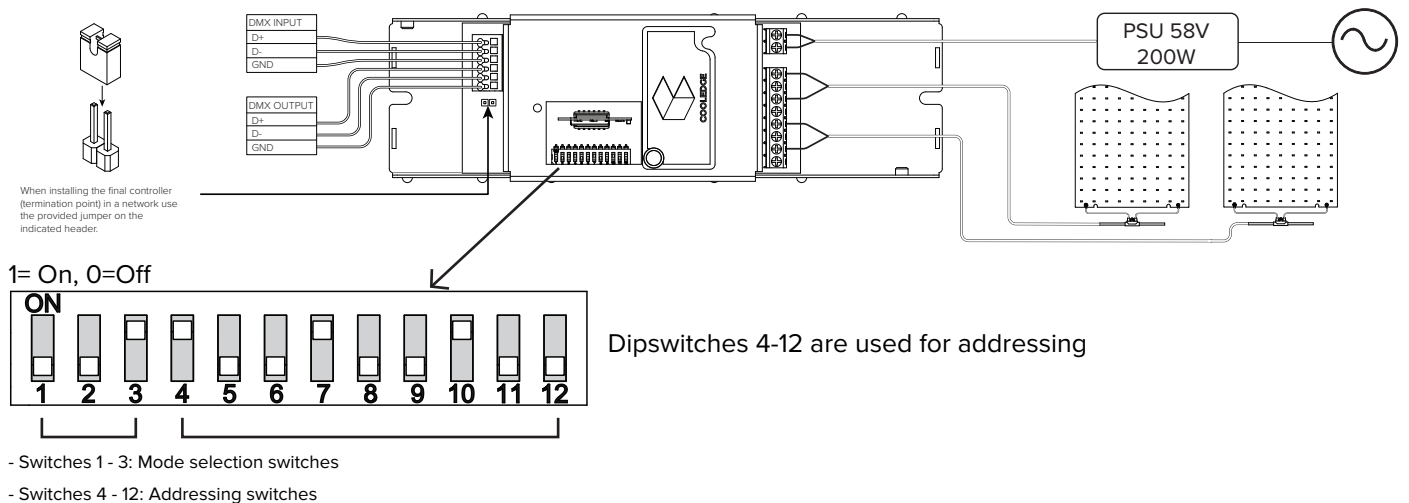
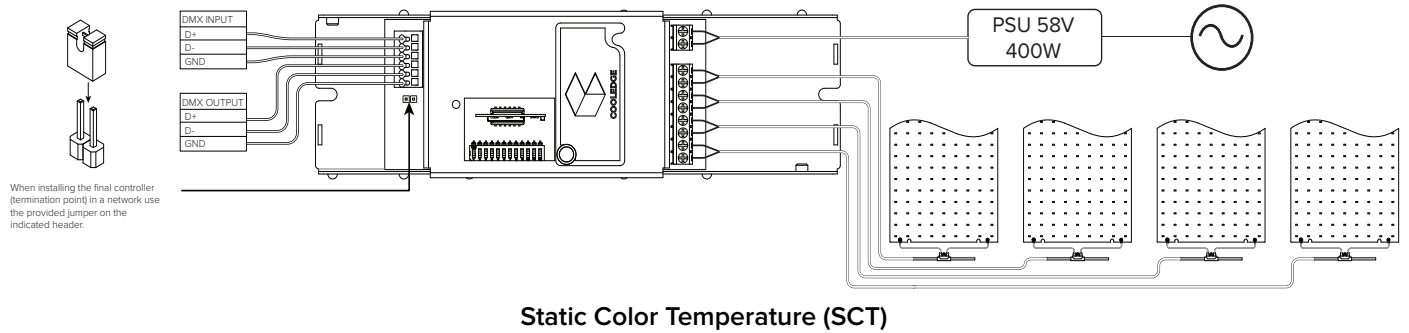
## HOW TO ORDER

Input Control Protocol	Ordering Code	Description
0-10V	CTR-SCT-010-58V <sup>1</sup>	90W (max.) Control Module, 0/1-10V, 58V, Single Channel x 1, 1% Dimming
0-10V & DALI	CTR-TNW-DAL-58V	180W (max.) Control Module for Tunable White, DALI/0-10V, 58V, Dual Channel x2, 1% Dimming
0-10V & DALI	CTR-DTW-DAL-58V	180W (max.) Control Module for Dim to Warm, DALI/0-10V, 58V, Dual Channel x2, 0.05% Dimming
0-10V & DALI	CTR-SCT-DAL-58V	360W (max.) Control Module, DALI/0-10V, 58V, Single Channel x 4, 0.05% Dimming

<sup>1</sup> Contact Cooleedge for details of this module.

## 4 COOLEGE CONTROL MODULES: DMX

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

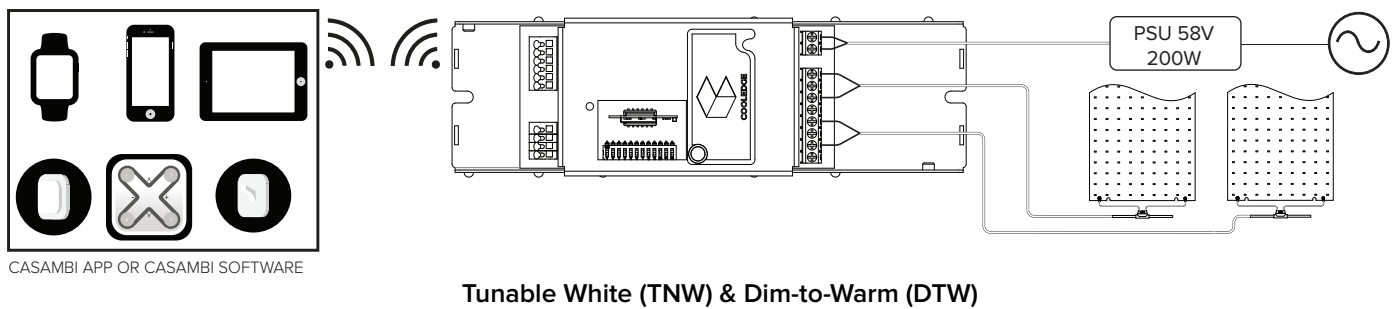
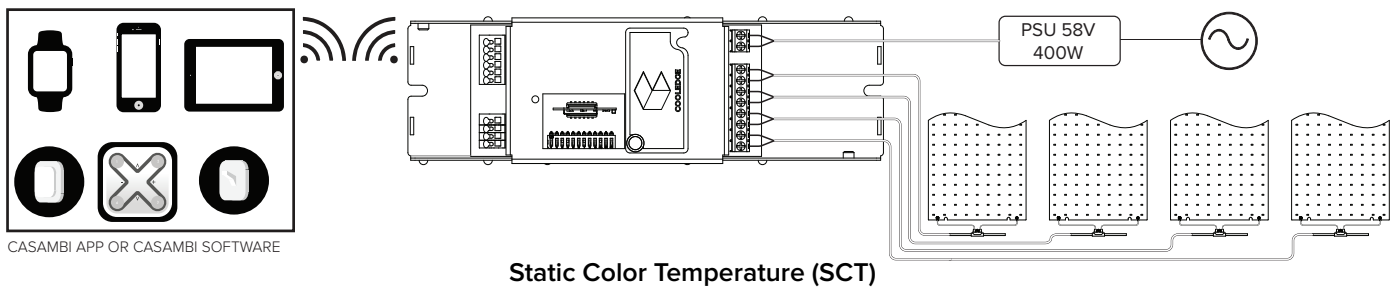
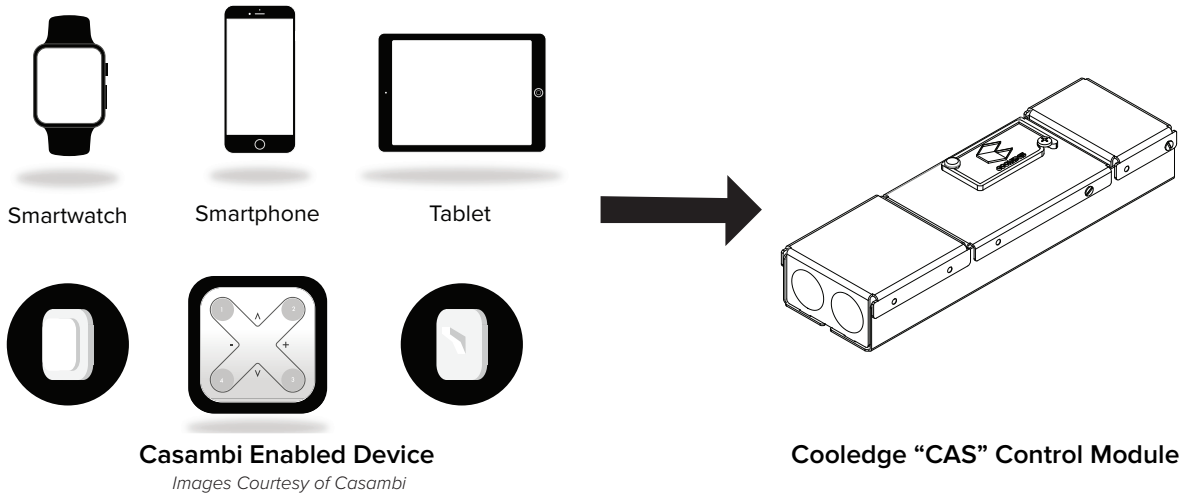


## HOW TO ORDER

Input Control Protocol	Ordering Code	Description
DMX	CTR-TNW-DMX-58V	180W (max.) Control Module for Tunable White, DMX, 58V, Dual Channel x 2, 1% Dimming
DMX	CTR-DTW-DMX-58V	180W (max.) Control Module for Dim to Warm, DMX, 58V, Dual Channel x 2, 0.05% Dimming
DMX	CTR-SCT-DMX-58V	360W (max.) Control Module, DMX, 58V, Single Channel x 4, 0.05% Dimming

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-TNW-CAS-58V	180W (max.) Control Module for Tunable White, Casambi wireless, 58V, Dual Channel x 2, 1% Dimming
Wireless (Casambi)	CTR-DTW-CAS-58V	180W (max.) Control Module for Dim to Warm, Casambi wireless, 58V, Dual Channel x 2, 0.05% Dimming
Wireless (Casambi)	CTR-SCT-CAS-58V	360W (max.) Control Module, Casambi wireless, 58V, Single Channel x 4, 0.05% Dimming