



# LED Driver

[www.DeltaPSU.com](http://www.DeltaPSU.com)





## About Delta

Delta, founded in 1971, is a global provider of power and thermal management solutions. Its mission statement, "To provide innovative, clean and energy-efficient solutions for a better tomorrow," focuses on addressing key environmental issues such as global climate change. As an energy-saving solutions provider with core competencies in power electronics and automation, Delta's business categories include Power Electronics, Automation, and Infrastructure.

Delta offers some of the most energy efficient power products in the industry, including switching power supplies with efficiency over 90%, telecom power with up to 98%, and PV inverters with up to 99.2% efficiency. We have also developed the world's first server power supply certified as 80 Plus Titanium.

In response to the challenge of climate change, Delta will remain committed to the research and development of innovative, energy-saving products, solutions and services that contributing substantially to the sustainable development of mankind.

## Business Categories

### Power Electronics

- Components
- Power and System
- Fan & Thermal Management
- Automotive Electronics
- **Innergie**

### Automation

- Industrial Automation
- Building Automation

### Infrastructure

- ICT Infrastructure
- Energy Infrastructure & Industrial Solutions
- **vivitek**  
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## About Power and System Business Group (PSBG)

- World's leading provider of power products and solutions
- First power product launched in 1983



**P**ower Conversion



**S**mart Drive & Control



**B**attery Charger



**G**reen Energy

## Power to a Smart Future with High Energy Efficiency

PSBG offers cutting-edge power products and system to innovate cloudcomputing, network connectivity, client devices, industrial and medical industry, lighting, and appliances and e-mobility with global customers.



**Lighting Power Business Unit (LTBU)**

- Established in 2000
- 1<sup>st</sup> LED driver launched in 2006
- More than 20 years of experience in lighting power
- Broad product portfolio

## Turn On the Smart Future



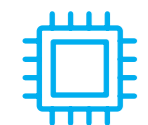
### Connected Smart Lighting

- DALI-2 certificated LED driver for single channel DT6 and tunable white DT8 applications
- D4i certificated LED driver support part 150/250/251/252/253 for inter-luminaire applications



### High Efficiency & High Power Density

- Patented series resonant converter technology to enhance efficiency and power density
- Cutting-edge topology for improved performance



### Digital & Wireless Solution

- Output current adjustment via wireless programming technology
- Wide output voltage and current operating window
- Precise dimming control with 1% output



### Reliable Product Development

- Patented water-proof case design ensures consistent performance in high-temperature
- Cost-competitive IP67-rated LED drivers are ideal for various outdoor applications
- Over 10 years' experience in sophisticated product design and manufacturing



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# Product Overview

## Outdoor LED Drivers

Series	Models	Iout (mA)	Pout (W)	Vin (V <sub>AC</sub> )	Dimming Type	Ingress Protection/ Environmental Locations	Programming Tool	Safety	MP SKDL	Page
EUACO ARENA SPORT	EUACO-1K0140GLA	500~1400mA	1000	220V-400	DALI-2	IP66	SDPTDV05Uax	CE,ENEC,UKCA	MP	12
	EUACO-1K0140GDA	500~1400mA	1000	220V-400	RDM/DMX	IP66		CE,ENEC,UKCA		12
	EUACO-1K5140GLA	500~1400mA	1500	220V-400	DALI-2	IP66		CE,ENEC,UKCA		12
	EUACO-1K5140GDA	500~1400mA	1500	220V-400	RDM/DMX	IP66		CE,ENEC,UKCA		12
	EUACO-2K1200GIA	700~2000mA	2100	220V-400	DALI-2/D4i	IP66		CE,ENEC,UL,RCM,UKCA	New	13
	EUACO-2K1200GDA	700~2000mA	2100	220V-400	RDM/DMX	IP66		CE,ENEC,UL,RCM,UKCA	New	13
	EUACO PREMIUM	EUACO-022105GIA	200-1050mA	22	220-240	DALI-2/D4i		IP20	NFC or SDPTDV05Uax	CE,ENEC,UKCA
EUACO-040105GIA		200-1050mA	40	220-240	DALI-2/D4i	IP20	CE,ENEC,UKCA	New		14
EUACO-075105GIA		200-1050mA	75	220-240	DALI-2/D4i	IP20	CE,ENEC,UKCA	New		14
EUACO-130105GIA		200-1050mA	130	220-240	DALI-2/D4i	IP20	CE,ENEC,UKCA	2023 Q2		14
EUACO-170105GIA		200-1050mA	170	220-240	DALI-2/D4i	IP20	CE,ENEC,UKCA	2023 Q2		14
EUACO LITE		EUACO-022105GLB	200-1050mA	22	220-240	DALI-2	IP20	NFC or SDPTDV05Uax		CE,ENEC,UKCA
	EUACO-040105GLB	200-1050mA	40	220-240	DALI-2	IP20	CE,ENEC,UKCA		MP	15
	EUACO-075105GLB	200-1050mA	75	220-240	DALI-2	IP20	CE,ENEC,UKCA		New	15
	EUACO-130105GLB1	200-1050mA	130	220-240	DALI-2	IP20	CE,ENEC,UKCA		New	15
	EUACO-170105GLB1	200-1050mA	170	220-240	DALI-2	IP20	CE,ENEC,UKCA		New	15
	EUACO PRO	EUACO-040105GLA	200-1050mA	40	220-240	DALI-2	IP20		NFC	CE,ENEC,UKCA
EUACO-075105GLA		200-1050mA	75	220-240	DALI-2	IP20	CE,ENEC,UKCA	16		
EUACO-130105GLA		200-1050mA	130	220-240	DALI-2	IP20	CE,ENEC,UKCA	16		
EUACO-170105GLA		200-1050mA	170	220-240	DALI-2	IP20	CE,ENEC,UKCA	16		
EUACO PRO	EUACO-150140GA	600-1400mA	150	220-240	0-10V	IP66/IP67	PTDV05UB	CE,ENEC,CCC,UKCA	MP	17
	EUACO-200140GA	600-1400mA	200	220-240	0-10V	IP66/IP67		CE,ENEC,CCC,UKCA		17
	EUACO-250140GA	600-1400mA	250	220-240	0-10V	IP66/IP67		CE,ENEC,CCC,UKCA		17

## Outdoor LED Drivers

Series	Model	Iout (mA)	Pout (W)	Vin (V <sub>AC</sub> )	Dimming Type	Ingress Protection/ Environmental Locations	Programming Tool	Safety	MP SKDL	Page
USCI LITE	USCI-055180GB	520-1800	55	120-277	0-10V	Dry and Damp	PTDV05UB	UL	New	18
	USCI-100140GB	600-1400	100	120-277	0-10V	Dry and Damp		UL	2023 Q2	18
	USCI-200140GB	600-1400	200	120-277	0-10V	Dry and Damp		UL	MP	18
USC4 LITE	USC4-055180GB	520-1800	55	277-480	0-10V	Dry and Damp	PTDV05UB	UL	New	19
	USC4-100140GB	600-1400	100	277-480	0-10V	Dry and Damp		UL		19
	USC4-200140GB	600-1400	200	277-480	0-10V	Dry and Damp		UL	MP	19
USCI PRO	USCI-075140GA	500-1400	75	120-277	0-10V	Dry and Damp	PTDV05UB	UL,CE,UKCA	MP	20
	USCI-100140GA	600-1400	100	120-277	0-10V	Dry and Damp		UL,CE,UKCA		20
	USCI-150140GC	600-1400	150	120-277	0-10V	Dry and Damp		UL,CE,UKCA		20
	USCI-200140GA	600-1400	200	120-277	0-10V	Dry and Damp		UL,CE,UKCA		21
	USCI-200175GA	700-1750	200	120-277	0-10V	Dry and Damp		UL,CE,UKCA		21
	USCI-200175GLA	700-1750	200	120-277	DALI-2	Dry and Damp		SDPTDV05Uax		UL,CE,UKCA
USCO PRO	USCO-075140GA	500 - 1400	75	110-277	0-10V	IP66/IP67/ Wet	PTDV05UB	UL,CE,ENEC,UKCA	MP	22
	USCO-100140GA	600 - 1400	100	110-277	0-10V	IP66/IP67/ Wet		UL,CE,ENEC,UKCA		22
	USCO-150140GC	600 - 1400	150	110-277	0-10V	IP66/IP67/ Wet		UL,CE,ENEC,UKCA		22
	USCO-200140GA	600 - 1400	200	110-277	0-10V	IP66/IP67/ Wet		UL,CE,ENEC,UKCA		23
	USCO-250140GA	600 - 1400	250	110-277	0-10V	IP66/IP67/ Wet		UL,CE,ENEC,UKCA		23
	USCO-320210GA	700 - 2100	320	110-277	0-10V	IP66/IP67/ Wet		UL,CE,ENEC,UKCA		23
	USCO-320280GA	700 - 2800	320	110-277	0-10V	IP67/ Wet		UL,CE,ENEC,UKCA		23
	USCO-600400GA	1000-3000	600	120-277	0-10V	IP66/IP67/ Wet		UL,CE,ENEC,UKCA		23
USC4 PRO	USC4-320280GA	1400 - 2800	320	277-480	0-10V	Wet	PTDV05UB	UL	MP	24
	USC4-600400GA	1000 - 3000	600	277-480	0-10V	Wet		UL		24

# Product Overview

## Indoor LED Drivers

Series	Model Name	Iout (mA)	Pout (W)	Vin (V <sub>AC</sub> )	Dimming Type	Ingress Protection/ Environmental Locations	Programming Tool	Safety	MP SKDL	Page
USCT LINEAR	USCT-030105GA	350-1050	30	120-277	0-10V	Dry and Damp	PTDV05UB	UL,Class2	MP	28
	USCT-050140GA	350-1400	50	120-277	0-10V	Dry and Damp		UL,Class2		28
	USCT-080210GA	700-2100	80	120-277	0-10V	Dry and Damp		UL,Class2		28
	USCT-040105LA	350-1050	Ch1+Ch2 =40W	110-277	DALI-2	Dry and Damp	SDPTDV05UAX	UL,Class2	2023 Q2	28
	USCT-040105L2A	350-1050	40	110-277	DALI-2	Dry and Damp		UL,Class2	2023 Q2	28
USCI LINEAR	USCI-100410FA	4150	96	120-277V	0-10V	Dry and Damp	X	CE, FCC, UL, Class 2, UKCA	MP	29
EUCI MINI	EUCI-020070GLA	250-700	20	220-240Vac 176-280Vdc	DALI	IP20	SDPTDV05UAX	CE, CB, ENEC, SELV, UKCA	MP	30
	EUCI-020070GLAB	250-700	20	220-240Vac 176-280Vdc	DALI	IP20		CE, CB, ENEC, SELV, UKCA	MP	30

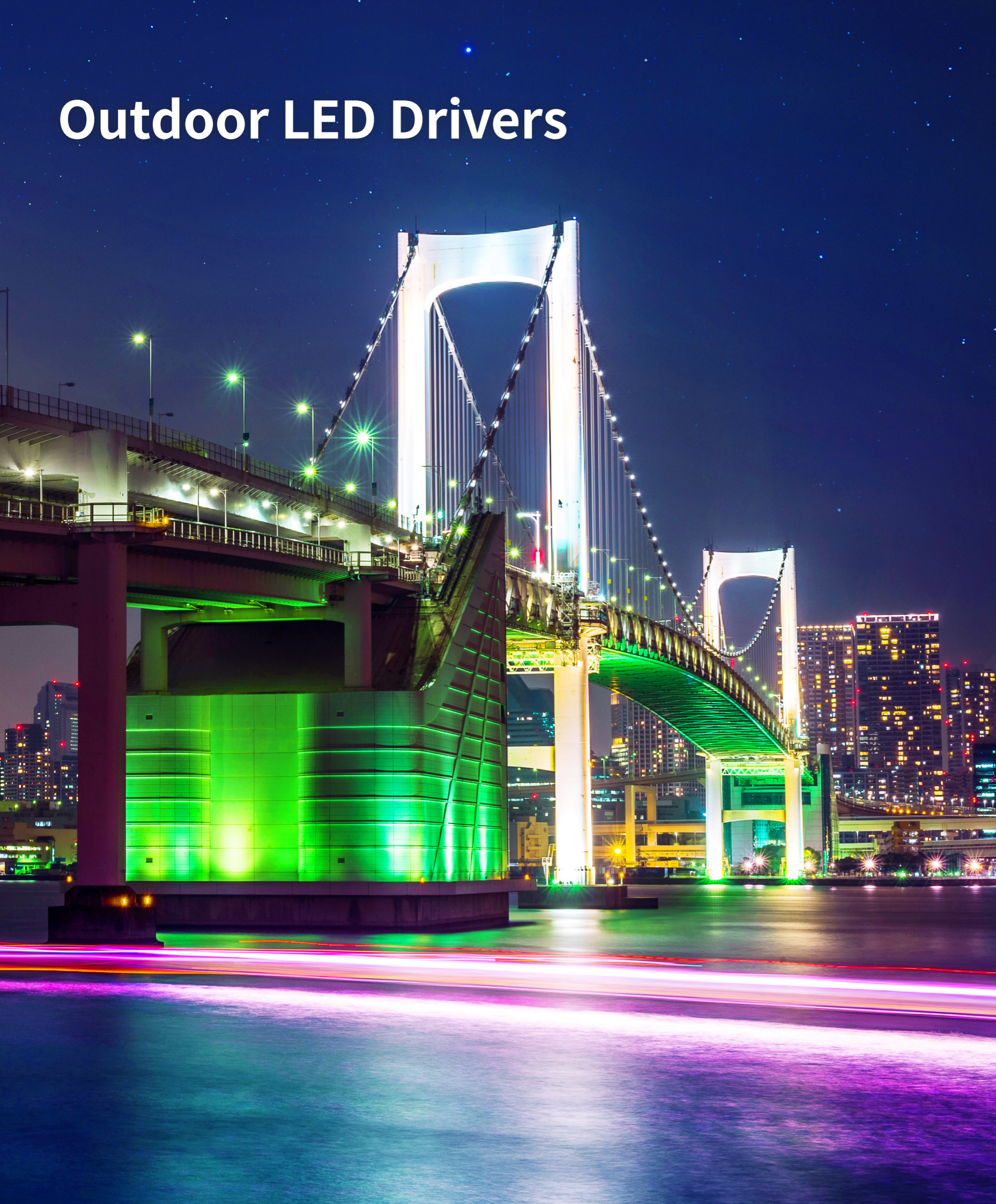
## Signage & Refrigeration LED Drivers

Series	Model Name	Vout (V)	Pout (W)	Vin (V)	Dimming Type	Ingress Protection/ Environmental Locations	Safety	MP SKDL	Page
USVI S12	USVI-020012FA	12	20	120-277	X	IP20 / Dry and Damp	UL, CE, UKCA	MP	34
	USVI-060012FG	12	60	120-277	X	IP20 / Dry and Damp	UL, CE, UKCA		34
	USVI-060012DG	12	60	120-277	0-10V	IP20 / Dry and Damp	UL, CE, UKCA		34
	USVI-060012FF	12	60	120-277	X	Dry and Damp	UL, CSA		35
	USVI-060012FH	12	60	120-277	X	Dry and Damp	UL, CSA		35
	USVI-120012FA	12 x 2ch	60 x 2ch	120-277	X	Dry and Damp	UL, CSA		35
	USVI-180012FA	12 x 3ch	60 x 3ch	120-277	X	Dry and Damp	UL, CSA		35
USVI S24	USVI-020024FA	24	20	120-277	X	IP20 / Dry and Damp	UL, CE, UKCA	MP	36
	USVI-060024FG	24	60	120-277	X	IP20 / Dry and Damp	UL, CE, UKCA		36
	USVI-060024DG	24	60	120-277	0-10V	IP20 / Dry and Damp	UL, CE, UKCA		36
	USVI-060024FH	24	60	120-277	X	IP54 / Dry and Damp	UL, CSA, CE, ENEC, UKCA		36
	USVI-100024DG	24	96	120-277	0-10V	IP20 / Dry and Damp	UL, CE, UKCA		37
	USVI-100024FG	24	96	120-277	X	IP20 / Dry and Damp	UL, CE, UKCA		37
	USVI-100024FE	24	96	120-277	X	Dry and Damp	UL		37
	USVI-100024FH	24	96	120-277	X	IP54 / Dry and Damp	UL, CSA, CE, ENEC, UKCA		37
	USVI-200024FA	24 x 2ch	96x2ch	120-277	X	Dry and Damp	UL, CSA		37

## Signage & Refrigeration LED Drivers

Series	Models	Vout (V)	Pout (W)	Vin (V)	Dimming Type	Ingress Protection/ Environmental Locations	Safety	MP SKDL	Page
USVI RDL	USVI-020024FR	24	20	198-264	X	IP50/ Dry and Damp	CE, ENEC, UKCA	2023 Q2	38
	USVI-060024FR	24	60	108-305	X	IP54/ Dry and Damp	UL, CE, ENEC, UKCA, CCC	MP	38
	USVI-080024FR1	24	80	108-305	X	IP54/ Dry and Damp	UL, CE, ENEC, UKCA, CCC		38
	USVI-100024FR1	24	96	108-305	X	IP54/ Dry and Damp	UL, CE, ENEC, UKCA, CCC		38
	USVI-240024FR	24	240	220-240	X	IP54/ Dry and Damp	CE, ENEC, UKCA		38
JPVO S12	JPVO-030012FA	12	30	100-242	X	IP67	PSE Clause 1	MP	39
	JPVO-060012FA	12	60	100-242	X	IP67	PSE Clause 1		39
	JPVO-100012FA	12	100	100-242	X	IP67	PSE Clause 1		39
	JPVO-150012FA	12	150	100-242	X	IP67	PSE Clause 1		39
JPVO S24	JPVO-030024FA	24	30	100-242	X	IP67	PSE Clause 1	MP	40
	JPVO-060024FA	24	60	100-242	X	IP67	PSE Clause 1		40
	JPVO-090024FA	24	90	100-242	X	IP67	PSE Clause 1		40
	JPVO-150024FA	24	150	100-242	X	IP67	PSE Clause 1		41
	JPVO-200024FA	24	200	100-242	X	IP67	PSE Clause 1		41
	JPVO-300024FA	24	300	100-242	X	IP67	PSE Clause 1		41
JPVI S12	JPVI-020012FA	12	20	100-277	X	IP54	PSE Clause 2	MP	42
	JPVI-060012FK	12	60	100-242	X	IP54	PSE Clause 1		42
	JPVI-100012FK	12	100	100-242	X	IP54	PSE Clause 1		42
	JPVI-150012FK	12	150	100-242	X	IP54	PSE Clause 1		42
JPVI S24	JPVI-020024FA	24	20	100-277	X	IP54	PSE Clause 2	MP	43
	JPVI-060024FA	24	60	100-242	X	IP54	PSE Clause 1		43
	JPVI-100024FA	24	100	100-242	X	IP54	PSE Clause 1		43
	JPVI-060024FK	24	60	100-242	X	IP54	PSE Clause 1		43
	JPVI-100024FK	24	100	100-242	X	IP54	PSE Clause 1		43
	JPVI-150024FK	24	150	100-242	X	IP54	PSE Clause 1		43

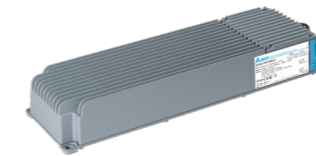
# Outdoor LED Drivers



## Introduction

For sustainability and environmental friendliness, businesses pursue energy efficiency and cost-saving methods. Enabling high energy efficiency in terms of lumens per watt, Delta Class 1 LED drivers reduce the energy cost of outdoor and industrial applications. Their programmable output provides the flexibility and the robust design enables a high level of protection against water and dust, ensuring the lighting works efficiently in the any situation.

### Featured Products



#### EUCO ARENA SPORT

- 3 independent programmable output channels
- Max output power 500W (per output channel)
- DALI-2 and DMX/RDM control interface
- Max remote distance 200 meters
- Very low pk-pk current ripple(1%) for stadium lighting



#### EUCI PREMIUM

- Flexible and fully configuration via NFC
- Meet D4i certification
- Built in DALI BUS Power, Luminaire data,
- Energy report, Diagnostic& Maintain
- High Surge capability DM:6KV / CM:10KV
- Design and fix for luminaires of protection class I and II
- High lifetime >50khrs



#### EUCI LITE

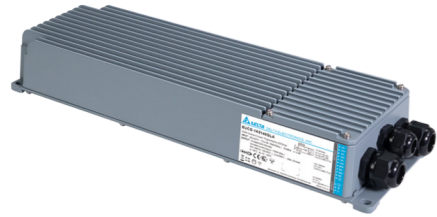
- Flexible and fully configuration via NFC
- DALI-2 certified, 5-100% dimming range
- High Surge capability DM:6KV / CM:10KV
- Design and fix for luminaires of protection class I and II
- High lifetime >50 khrs



#### USCI LITE

- Flexible configurable operating windows
- Autonomous dimming includes three"Smart Timer Dim" operation modes with five independent levels: Fixed Timer, Midnight Centric Timer, and Ratio Rescale Timer
- 6kV Combi-wave surge rating meet ANSI C82.77-5
- UL LISTED, Class P & Type HL , UL Dry & Damp
- 0 - 10V dimming available
- 50,000 hours lifetime

# EUCO ARENA SPORT

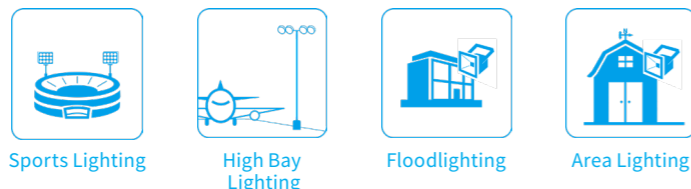


- 3 independent programmable output channels
- Max output power 500W (per output channel)
- DALI-2 and DMX/RDM control interface
- Max remote distance 200 meters
- Very low pk-pk current ripple (1%) for stadium lighting



OUTPUT RATINGS		EUCO-1K5140GLA	EUCO-1K5140GDA	EUCO-1K0140GLA	EUCO-1K0140GDA
Output Voltage Range		260-500 V <sub>DC</sub>			
Max. No Load Output Voltage		600 V <sub>DC</sub>			
Max. Output Power Range		500 W per channel, 1.5 kW for 3 channels or 1.0 kW for 2 channels total			
Adjustable Output Current		500-1400 mA			
Current Accuracy		±3%			
Output Current Ripple		1%(Typ), <2% (ripple = (pk-pk)/avg)			
INPUT RATINGS					
Input Voltage Range		198-440 V <sub>AC</sub>			
Input Frequency Range		47-63 Hz			
Normal Input Current	220 V <sub>AC</sub>	7.2 A		4.8 A	
Efficiency	220 V <sub>AC</sub>	95.2%			
	400 V <sub>AC</sub>	96%			
Standby Power Consumption		<0.5 W at 230 V <sub>AC</sub> , in compliance with Erp (EU) 2019/2020			
Inrush Current (Apk / 50%-us)		<=25 A, pulse width <8 mS @400 V <sub>AC</sub>			
Power Factor		> 0.95 @ 198-440 V <sub>AC</sub> , full load			
Leakage Current		< 1 mA @ 400 V <sub>AC</sub>			
MECHANICAL					
Casing		Aluminum case, Color : Dark Gray			
Dimensions (L x W x D)		500 x 152 x 77 mm			
Unit weight		5.6 kg			
Cooling System		Natural Convection			
Input	Wago 264-103	With the sign of L, N, PE			
Output	Wago 264-111	With the sign of PE, NTC, V3+ V3-, V2+, V2-, V1+, V1-			
Dimming	Wago 264-111	With the sign of DA+, DA- for GLA / With the sign of COM, D1+, D1- for GDA			
ENVIRONMENT					
Ambient Temperature	Operating	-40°C to +50°C			
	Storage	-40°C to +85°C			
Maximum Case Temperature		+85°C		+75°C	
Relative Humidity	Operating	10 to 100% RH (Non-Condensing)			
Ingress Protection classification		IP66			
Impact Protection classification		IK08			

## Applications



# EUCO ARENA SPORT

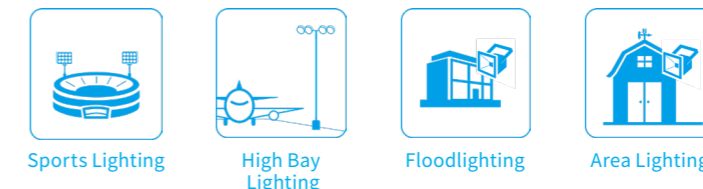


- 2.1 kW for 3 channels
- Programmable DALI2/D4i or DMX/RDM control interface
- Flicker-free for HDTV broadcasting
- IP66 rated junction box for easy wiring connection
- Ideal for high-pole industrial and arena sport lighting



OUTPUT RATINGS		EUCO-2K1200GIA	EUCO-2K1200GDA
Output Voltage Range		250-550 V <sub>DC</sub>	
Max. No Load Output Voltage		600 V <sub>DC</sub>	
Max. Output Power Range		2100W	
Adjustable Output Current		700-2000 mA	
Current Accuracy		±3%	
Output Current Ripple		1% (pk-pk/avg)	
INPUT RATINGS			
Input Voltage Range		198-440 V <sub>AC</sub>	
Input Frequency Range		47-63 Hz	
Normal Input Current	220 V <sub>AC</sub>	11A	
Efficiency	220 V <sub>AC</sub>	96.5%	
	400 V <sub>AC</sub>	97.8%	
Standby Power Consumption		<0.5 W at 230 V <sub>AC</sub> , in compliance with Erp (EU) 2019/2020	
Inrush Current (Apk / 50%-us)		<=25A, pulse width < 8mS@400 V <sub>AC</sub>	
Power Factor		>0.95 @ full load	
Leakage Current		< 1 mA @ 400 V <sub>AC</sub>	
MECHANICAL			
Casing		Die Casting	
Dimensions (L x W x D)		500 x 152 x 77(mm)	
Unit weight		5.6 kg	
Cooling System		Natural Convection	
Input	Wago 264-103	With the sign of L, N, PE	
Output	Wago 264-111	With the sign of PE, NTC, V3+ V3-, V2+, V2-, V1+, V1-	
Dimming	Wago 264-111	With the sign of DA+, DA- for GLA / With the sign of COM, D1+, D1- for GDA	
ENVIRONMENT			
Ambient Temperature	Operating	-40°C to +50°C	
	Storage	-40°C to +85°C	
Maximum Case Temperature		0% to 100%, non-condensing	
Relative Humidity	Operating	10 to 100% RH (Non-Condensing)	
Ingress Protection classification		IP66	
Impact Protection classification		IK08	

## Applications



# EUCI PREMIUM



- Integrated Bus Power Supply for sensors and radios (DALI part 250)
- Integrated 24V<sub>DC</sub> auxiliary power supply (DALI Part 150)
- Memory Bank 1 Extension / Luminaire Data (DALI part 251)
- Highly accurate energy reporting (DALI Part 252)
- Diagnostics & Maintenance data (DALI part 253)
- Easy to design-in with high surge protection - 10kV for luminaires of protection class I and class II
- Midnight Centric Timer for autonomous dimming



OUTPUT RATINGS		EUCI-022105GIA	EUCI-040105GIA	EUCI-075105GIA	EUCI-130105GIA	EUCI-170105GIA
Output Voltage Range		8-48V <sub>DC</sub>	20-77V <sub>DC</sub>	35-150V <sub>DC</sub>	60-200V <sub>DC</sub>	80-310V <sub>DC</sub>
Max. No Load Output Voltage		90V	120V	210V	280V	400V
Output Power Range		22W	40W	75W	130W	170W
Adjustable Output Current		200-1050 mA				
Output Current LF Ripple		4% (ripple = peak-average/average) at full load, (<100 Hz)				
INPUT RATINGS						
Input Voltage Range		198-264V <sub>AC</sub>				
Input Frequency Range		47-63 Hz				
Max. Input Current	230V <sub>AC</sub>	0.12A	0.23A	0.41A	0.70A	0.87A
Efficiency <sup>1)</sup>	230V <sub>AC</sub>	86% @ 0.46A / 83% @ 1.05A	89.5% @ 0.52A / 86.5% @ 1.05A	91% @ 0.5A / 88% @ 1.05A	93% @ 0.65A / 92% @ 1.05A	93% @ 0.55A / 92% @ 1.05A
Inrush Current	230V <sub>AC</sub>	50A/180 uS			70A/200 uS	70A/200 uS
Power Factor		> 0.95 @ 230V <sub>AC</sub> , 100% load				
Total Harmonic Distortion		<20% @ 230V <sub>AC</sub> , 100% Load				
Leakage Current		< 0.7 mA peak @ 230V <sub>AC</sub>				
Standby Power		0.5W @ DALI standby mode, 230V <sub>AC</sub>				
MECHANICAL						
Casing		Plastic, Color : Black				
Dimensions (L x W x D) [mm] / [inch]		133.0 x 77.0 x 40.0 / 5.24 x 3.03 x 1.57		150 x 90.0 x 40.0 / 5.91 x 3.54 x 1.57	170 x 100.0 x 40.0 / 6.69 x 3.94 x 1.57	
Unit weight [lb] / [kg]		1.256/0.57		1.69/0.77	2.2/1.0	
Cooling System		Convection				
Input Connector		Terminal, 5-pole, Conductor 0.5~2.5 mm <sup>2</sup> , Strip length 10~11 mm Line : Black, Neutral : White, Space*2 : Gray, EUQ1 : Green)				
Output and Control Connector		Terminal, 7-pole, Conductor 0.5~1.5 mm <sup>2</sup> , Strip length 8.5~9.5 mm Output : LED+ : Red, LED- : Black, MTP+ : Light blue, MTP- : White Control : 24Vaux : Red, DA+ : Pink, DA-/GND : Gray				
ENVIRONMENT						
Ambient Temperature	Operating	-40 °C to +55 °C				
	Storage	-40 °C to +85 °C				
Maximum Case Temperature		+85 °C	+90 °C			
Environmental Locations		IP20				

## Applications



# EUCI LITE

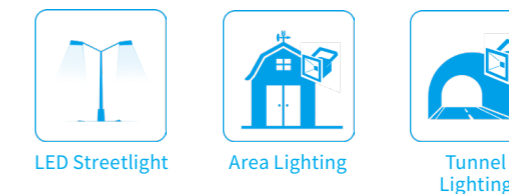


- DALI-2 certified LED driver, 5%-100% dimming range
- Flexible configurable operating windows via NFC, DALI
- Autonomous dimming includes three "Smart Timer Dim" operation modes with five independent levels: Fixed Timer, Midnight Centric Timer, and Ratio Rescale Timer
- High surge immunity 6KV / 10KV
- Design and fix for luminaires of protection class I and protection class II



OUTPUT RATINGS		EUCI-022105GLB	EUCI-040105GLB	EUCI-075105GLB	EUCI-130105GLB1	EUCI-170105GLB1
Output Voltage Range		8-48V <sub>DC</sub>	20-77V <sub>DC</sub>	35-150V <sub>DC</sub>	60-200V <sub>DC</sub>	80-310V <sub>DC</sub>
Max. No Load Output Voltage		90V	120V	210V	260V	380V
Output Power Range		22W	40W	75W	130W	170W
Adjustable Output Current		200-1050 mA				
Output Current LF Ripple		4% (ripple = peak-average/average) at full load, (<100 Hz)				
INPUT RATINGS						
Input Voltage Range		198-264V <sub>AC</sub>				
Input Frequency Range		47-63 Hz				
Max. Input Current	230V <sub>AC</sub>	0.12A	0.23A	0.43A	0.67A	0.87A
Efficiency <sup>1)</sup>	230V <sub>AC</sub>	90% @ 0.46A / 86% @ 1.05A	90% @ 0.52A / 87% @ 1.05A	91% @ 0.52A / 88% @ 1.05A	93% @ 0.65A / 92% @ 1.05A	93% @ 0.55A / 92% @ 1.05A
Inrush Current	230V <sub>AC</sub>	20A/250 uS			70A/250 uS	70A/250 uS
Power Factor		>0.95 @ 230V <sub>AC</sub> , 100% Load				
Total Harmonic Distortion		<20% @ 230V <sub>AC</sub> , 100%				
Leakage Current		< 0.7 mA peak @ 230V <sub>AC</sub>				
Standby Power		0.5W @ DALI standby mode, 230V <sub>AC</sub>				
MECHANICAL						
Casing		Plastic, Color : Black				
Dimensions (L x W x D) [mm] / [inch]		133.0 x 77.0 x 40.0 / 5.24 x 3.03 x 1.57			150.0 x 90.0 x 40.0 / 5.91 x 3.54 x 1.57	170.0 x 100.0 x 40.0 / 6.69 x 3.94 x 1.57
Unit weight [lb] / [kg]		1.245/0.565			1.67/0.75	2.05/0.93
Cooling System		Convection				
Input Connector		Terminal, 5-pole, Conductor 0.5~2.5 mm <sup>2</sup> , Strip length 10~11 mm Line : Black, Neutral : White, Space*2 : Gray, EUQ1 : Green)				
Output Connector		Terminal, 6-pole, Conductor 0.5~1.5 mm <sup>2</sup> , Strip length 8.5~9.5 mm LED+ : Red, LED- : Black, GND : White, MTP : Light blue, DALI*2 : Blue				
ENVIRONMENT						
Ambient Temperature	Operating	-40 °C to +55 °C				
	Storage	-40 °C to +85 °C				
Maximum Case Temperature		+85 °C	+90 °C			
Environmental Locations		IP20				

## Applications





# EUCI PRO



- Integrated 12V<sub>DC</sub>/100mA auxiliary power supply
- Easy configurable operating windows via NFC
- Self Adapting-Midnight for autonomous dimming
- Suitable for Luminaires with Protection Class I and II
- High surge immunity (CM/DM)



OUTPUT RATINGS		EUCI-040105GLA	EUCI-075105GLA	EUCI-130105GLA	EUCI-170105GLA
Output Voltage Range		28 - 77 V <sub>DC</sub>	54 - 110 V <sub>DC</sub>	60 - 200 V <sub>DC</sub>	80 - 310 V <sub>DC</sub>
Max. No Load Output Voltage		85 Vrms	120 Vrms	250 Vrms	350 Vrms
Output Power Range		40 W	75 W	130 W	170 W
Adjustable Output Current (AOC)		200-1050 mA	350-1050 mA	350-1050 mA	350-1050 mA
Line Regulation		± 1% (@ 220 - 240 V <sub>AC</sub> input)			
Load Regulation		± 3% (@ Min-Max output voltage)			
Output Current LF Ripple		5% (ripple = peak-average/average) at full load, (<100 Hz)			
INPUT RATINGS					
Input Voltage Range		198 - 264 V <sub>AC</sub>			
Input Frequency Range		47 - 63 Hz			
Max Input Current	220 V <sub>AC</sub>	0.25 A	0.48 A	0.67 A	0.8 A
Efficiency <sup>2)</sup>	230 V <sub>AC</sub>	90% @ 0.7 A	90.4% @ 0.7 A	93% @ 0.7 A	
Inrush Current (Apk/50%-uS@Cold Start)	230 V <sub>AC</sub>	30 A / 200 uS	50 A / 200 uS	10 A / 250 uS	
Power Factor		> 0.95 @ 230 V <sub>AC</sub> , 100% load, > 0.90 @ 230 V <sub>AC</sub> , 50% load			
Leakage Current		< 0.7 mA peak @ 230 V <sub>AC</sub>			
MECHANICAL					
Casing		Plastic, Color : Black			
Dimensions (L x W x H)		133.0 x 77.0 x 40.0 mm 5.24 x 3.03 x 1.57 inch	150.0 x 90.0 x 40.0 mm 5.91 x 3.54 x 1.57 inch	170.0 x 100.0 x 40.0 mm 6.69 x 3.94 x 1.57 inch	
Unit Weight		0.61 kg (1.34 lb)	0.75 kg (1.65 lb)	0.93 kg (2.05 lb)	
Cooling System		Convection			
Input Connector		Terminal, 3-pole (Line/Neutral/Spacer), Conductor 0.5~2.5 mm <sup>2</sup> , Strip length 10...11 mm			
Control Connector		Terminal, 2-pole (DALI1/DALI2), Conductor 0.5~2.5 mm <sup>2</sup> Terminal, 2-pole (Spacer/EUQI), Conductor 0.5~1.5 mm <sup>2</sup>		Terminal, 4-pole (DALI1/DALI2/Spacer/EUQI), Conductor 0.5~1.5 mm <sup>2</sup> , Strip length 8.5...9.5 mm	
Output Connector		Terminal, 6-pole (Vaux, PRG NTC/GND/Rset/LED+/LED-), Conductor 0.5~1.5 mm <sup>2</sup> , Strip length 8.5...9.5 mm			
ENVIRONMENT					
Ambient Temperature	Operating	-40°C to +60°C	-40°C to +55°C		
	Storage	-40°C to +85°C			
Relative Humidity Operating		10 to 90% RH (Non-Condensing)			
Ingress Protection Classification		IP20			

## Applications



# EUCO PRO

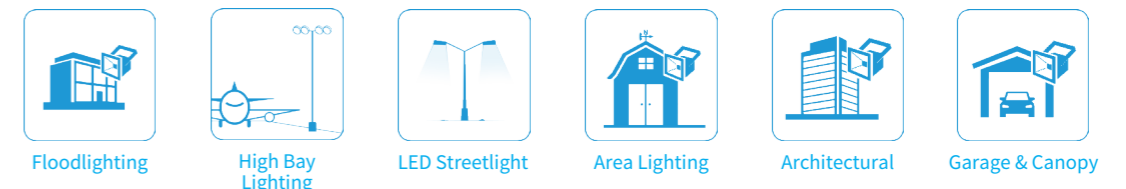


- Wild range constant current design
- High efficiency up to 94%
- IP66/IP67 ingress protection from most outdoor applications
- Adjustable constant current level via programmable tool
- Common mode 6kV and differential mode 6kV surge immunity
- 0-10V dimming available



OUTPUT RATINGS		EUCO-150140GA	EUCO-200140GA	EUCO-250140GA
Output Voltage Range		72 - 214 V <sub>DC</sub>	75 - 190 V <sub>DC</sub>	90 - 238 V <sub>DC</sub>
Max. No Load Output Voltage		250 Vrms	230 Vrms	250 Vrms
Output Power Range		150 W	200 W	250 W
Adjustable Output Current (AOC)		500 - 1400 mA	500 - 1400 mA	600 - 1400 mA
Line Regulation		± 1% (@ 220-240 V <sub>AC</sub> input)		
Load Regulation		± 3% (@ Min-Max output voltage)		
Output Current LF Ripple		5% (ripple = peak-average/average) at full load, (<100 Hz)		
INPUT RATINGS				
Input Voltage Range		176 - 305 V <sub>AC</sub>		
Input Frequency Range		47 - 63 Hz		
Max Input Current	220V <sub>AC</sub>	0.9 A	1.1 A	1.3 A
Efficiency <sup>1)</sup>	230V <sub>AC</sub>	93% @ 0.7 A	94% @ 1.05 A	94% @ 1.05 A
Inrush Current	230V <sub>AC</sub>	100 A / 250 uS	110 A / 250 uS	280 A / 150 uS
Power Factor		100% Load: PF>0.95@230 V <sub>AC</sub> , >50% Load: PF>0.9@230 V <sub>AC</sub>		
Leakage Current		< 0.7 mA peak @ 230 V <sub>AC</sub>		
MECHANICAL				
Casing		Aluminum, Color : Natural		
Dimensions (L x W x H)		174.0 x 68.0 x 37.0 mm 6.85 x 2.68 x 1.46 inch	220.0 x 68.0 x 37.0 mm 8.66 x 2.68 x 1.46 inch	240.0 x 68.0 x 37.0 mm 9.45 x 2.68 x 1.46 inch
Unit Weight		0.85 kg (1.87 lb)	1.1 kg (2.43 lb)	1.3 kg (2.87 lb)
Cooling System		Convection		
Input Cable		Line: Brown, Neutral: Blue, PE: Yellow/Green, Cable Length 300 mm		
Output Cable		Positive: Brown, Negative: Blue, NTC/PRG: Black, Cable Length 300 mm		
Dimming Cable		Dim(+): Violet, Dim(-): Gray, +12V: Black/White, Cable Length 300 mm		
ENVIRONMENT				
Ambient Temperature	Operating	-40°C to +50°C	-40°C to +55°C	
	Storage	-40°C to +85°C		
Relative Humidity Operating		10 to 90% RH (Non-Condensing)		
Ingress Protection Classification		IP66/IP67		

## Applications



# USCI LITE



- Flexible configurable operating windows
- Autonomous dimming includes three "Smart Timer Dim" operation modes with five independent levels: Fixed Timer, Midnight Centric Timer, and Ratio Rescale Timer
- 6 kV Combi-wave surge rating meet ANSI C82.77-5
- UL LISTED, Class P & Type HL , UL Dry & Damp
- 0 - 10V dimming available
- 50,000 hours lifetime

OUTPUT RATINGS		USCI-055180GB	USCI-100140GB	USCI-200140GB
Output Voltage Range		18-52.4V <sub>DC</sub>	50-143V <sub>DC</sub>	75-190V <sub>DC</sub>
Max. No Load Output Voltage		60Vrms	150Vrms	230Vrms
Output Power Range		55W	100W	200W
Adjustable Output Current		520-1800mA	600-1400mA	600-1400mA
Output Current LF Ripple		15% (ripple = peak-average/average) and Low frequency ( ≤ 120 Hz) content <5% @Full Load		
INPUT RATINGS				
Input Voltage Range		108-305V <sub>AC</sub>		
Input Frequency Range		47-63Hz		
Max. Input Current	120V <sub>AC</sub>	0.55A	1.04A	2.1A
Efficiency <sup>1)</sup>	277V <sub>AC</sub>	90% @ 1.05A	92.5% @ 0.7A	93.5% @ 1.05A
Inrush Current	277V <sub>AC</sub>	100A/150uS	200A/150uS	200A/150uS
Power Factor		> 0.9 @ Full Load		
Total Harmonic Distortion		THD < 20% @ Full Load		
Leakage Current		< 0.75 mArms per UL8750		
MECHANICAL				
Casing		Steel case, color : Black		
Dimensions (L x W x D)		6.59 x 2.36 x 1.5 inch (168.0 x 60.0 x 38.0 mm)	9.45 x 2.36 x 1.5 inch (240.0 x 60.0 x 38.0 mm)	
Unit weight [lb] / [kg]		1.83 / 0.83		2.2 / 1.0
Cooling System		Convection		
Input Cable		L: Black, N: White; UL1316 18AWG solid copper wires Length 300 mm		
Output Cable		Positive: Red, Negative: Blue; NTC/PRG: Orange ; UL1316 18AWG solid copper wires Length 300 mm		
Dimming Cable		Dim(+): Purple, Dim(-): Pink ; UL1316 18AWG solid copper wires Length 300 mm		
ENVIRONMENT				
Ambient Temperature	Operating	-40 °C to +55 °C		
	Storage	-40 °C to +85 °C		
Maximum Case Temperature		+80 °C	+85 °C	+90 °C
Relative Humidity	Operating	10 to 90% RH (Non-Condensing)		
	Storage			
Environmental Locations		Dry & Damp		

\*For notes please see page 11

## Applications



# USC4 LITE



- Wide input operating voltage range targeting heavy industrial application
- Flexible configurable operating windows
- Autonomous dimming includes three "Smart Timer Dim" operation modes with five independent levels: Fixed Timer, Midnight Centric Timer, and Ratio Rescale Timer
- 6 kV Combi-wave surge rating meet ANSI C82.77-5
- UL LISTED, Class P & Type HL , UL Dry & Damp
- 0-10 V dimming available
- 50,000 hours lifetime

OUTPUT RATINGS		USC4-055180GB	USC4-100140GB	USC4-200140GB
Output Voltage Range		18-52V <sub>DC</sub>	50-143V <sub>DC</sub>	75-190V <sub>DC</sub>
Max. No Load Output Voltage		60Vrms	150Vrms	230Vrms
Output Power Range		55W	100W	200W
Adjustable Output Current		520-1800mA	600-1400mA	600-1400mA
Output Current LF Ripple		15% (ripple = peak-average/average) and Low frequency ( ≤ 120 Hz) content <5% @Full Load		
INPUT RATINGS				
Input Voltage Range		254-528V <sub>AC</sub>		
Input Frequency Range		47-63Hz		
Max. Input Current	277V <sub>AC</sub>	0.27A	0.45A	0.8A
Efficiency <sup>1)</sup>	480V <sub>AC</sub>	88.0% @ 1.05A	92.5% @ 0.7A	93.5% @ 1.05A
Inrush Current	480V <sub>AC</sub>	200A/200uS		
Power Factor		> 0.9 @ Full Load		
Total Harmonic Distortion		THD < 10% @ Full Load		
Leakage Current		< 0.75 mArms per UL8750		
MECHANICAL				
Casing		Steel case, color : Black		
Dimensions (L x W x D)		6.59 x 2.36 x 1.5 inch (168.0 x 60.0 x 38.0 mm)		9.45 x 2.36 x 1.5 inch (240.0 x 60.0 x 38.0 mm)
Unit weight [lb] / [kg]		1.83 / 0.83		2.2 / 1.0
Cooling System		Convection		
Input Cable		L: Black, N: White; UL1316 18AWG solid copper wires Length 300 mm		
Output Cable		Positive: Red, Negative: Blue; NTC/PRG: Orange ; UL1316 18AWG solid copper wires Length 300 mm		
Dimming Cable		Dim(+): Purple, Dim(-): Pink ; UL1316 18AWG solid copper wires Length 300 mm		
ENVIRONMENT				
Ambient Temperature	Operating	-40 °C to +55 °C		
	Storage	-40 °C to +85 °C		
Maximum Case Temperature		+80 °C	+85 °C	+90 °C
Relative Humidity	Operating	10 to 90% RH (Non-Condensing)		
	Storage			
Environmental Locations		Dry & Damp		

\*For notes please see page 11

## Applications



# USCI PRO



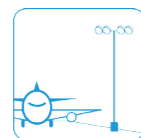
- Wide range constant current design
- Universal AC input voltage 120 - 277V<sub>AC</sub>
- High efficiency up to 94%
- Adjustable constant current level via programmable tool
- Common mode 6kV and differential mode 6kV surge immunity
- 0 - 10V dimming or DALI-2 available

OUTPUT RATINGS	USCI-075140GA	USCI-100140GA	USCI-150140GC
Output Voltage Range	36 - 107 V <sub>DC</sub>	47 - 143 V <sub>DC</sub>	72 - 214 V <sub>DC</sub>
Max. No Load Output Voltage	120 Vrms	150 Vrms	250 Vrms
Output Power Range	75 W	100 W	150 W
Adjustable Output Current (AOC)	500 - 1400 mA	600 - 1400 mA	600 - 1400 mA
Line Regulation	± 1% (@ 120 - 277V <sub>AC</sub> input)		
Load Regulation	± 3% (@ Min-Max output voltage)		
Output Current LF Ripple	5% (ripple = peak-average/average) at full load (<100Hz)		
INPUT RATINGS			
Input Voltage Range	108 - 305 V <sub>AC</sub>		
Input Frequency Range	47 - 63 Hz		
Max Input Current	120 V <sub>AC</sub> 0.82 A	1.04 A	1.53 A
Efficiency <sup>1)</sup>	277 V <sub>AC</sub> 89.5% @ 0.7 A	90% @ 0.7 A	91% @ 0.7 A
Inrush Current (Apk/50%-uS@Cold Start)	230 V <sub>AC</sub> 65 A / 250 uS	150 A / 250 uS	
Power Factor	> 0.98 @ 120 V <sub>AC</sub> , > 0.95 @ 230 V <sub>AC</sub> , > 0.92 @ 277 V <sub>AC</sub> & Full Load > 0.90 @ 120/230 V <sub>AC</sub> & > 50% Load: (277 V <sub>AC</sub> & > 70% Load)		
Leakage Current	< 0.5 mA rms & < 0.7 mA peak @ 277 V <sub>AC</sub>		
MECHANICAL			
Casing	Metal Sheet, Color: Black		
Dimensions (L x W x H)	167.5 x 60.0 x 37.5 mm 6.59 x 2.36 x 1.48 inch	240.5 x 60.0 x 37.8 mm 9.47 x 2.36 x 1.49 inch	
Unit Weight	0.73 kg (1.61 lb)	1.10 kg (2.43 lb)	
Cooling System	Convection		
Input Wire	Line: Black, Neutral: White, Wire Length 300 mm		
Output Wire	Positive: Brown, Negative: Blue, NTC/PRG: Black, Wire Length 300 mm		
Dimming Wire	Dim(+): Violet, Dim(-): Pink, +12V: Black/White, Wire Length 300 mm		
ENVIRONMENT			
Ambient Temperature	Operating	-40°C to +55°C	
	Storage	-40°C to +85°C	
Relative Humidity Operating	10 to 90% RH (Non-Condensing)		
Environmental Locations	Dry / Damp		

## Applications



Floodlighting



High Bay Lighting



LED Streetlight



Area Lighting



Garage & Canopy

# USCI PRO



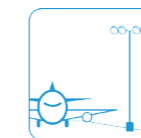
- Wide range constant current design
- Universal AC input voltage 120-277V<sub>AC</sub>
- High efficiency up to 94%
- Adjustable constant current level via programmable tool
- Common mode 6kV and differential mode 6kV surge immunity
- 0-10V dimming or DALI-2 available

OUTPUT RATINGS	USCI-200140GA	USCI-200175GA	USCI-200175GLA
Output Voltage Range	75 - 190 V <sub>DC</sub>	56 - 133 V <sub>DC</sub>	56 - 133 V <sub>DC</sub>
Max. No Load Output Voltage	230 Vrms	150 Vrms	150 Vrms
Output Power Range	200 W	200 W	200 W
Adjustable Output Current (AOC)	600 - 1400 mA	700 - 1750 mA	700 - 1750 mA
Line Regulation	± 1% (@ 120 - 277V <sub>AC</sub> input)		
Load Regulation	± 3% (@ Min-Max output voltage)		
Output Current LF Ripple	5% (ripple = peak-average/average) at full load (<100 Hz)		
INPUT RATINGS			
Input Voltage Range	108 - 305 V <sub>AC</sub>		
Input Frequency Range	47 - 63 Hz		
Max Input Current	120 V <sub>AC</sub>	2.1 A	
Efficiency <sup>1)</sup>	277 V <sub>AC</sub>	93.8% @ 1.05 A	93.5% @ 1.5 A
Inrush Current (Apk/50%-uS@Cold Start)	230 V <sub>AC</sub>	200 A / 250 uS	
Power Factor	> 0.98 @ 120 V <sub>AC</sub> , > 0.95 @ 230 V <sub>AC</sub> , > 0.92 @ 277 V <sub>AC</sub> & Full Load > 0.90 @ 120/230 V <sub>AC</sub> & > 50% Load: (277 V <sub>AC</sub> & > 70% Load)		
Leakage Current	< 0.5 mA rms & < 0.7 mA peak @ 277 V <sub>AC</sub>		
MECHANICAL			
Casing	Metal Sheet, Color: Black		
Dimensions (L x W x H)	240.5 x 60.0 x 37.8 mm 9.47 x 2.36 x 1.49 inch		
Unit Weight	1.10 kg (2.43 lb)		
Cooling System	Convection		
Input Wire	Line: Black, Neutral: White, Wire Length 300 mm		
Output Wire	Positive: Brown, Negative: Blue, NTC/PRG: Black, Wire Length 300 mm		
Dimming Wire	Dim(+): Violet, Dim(-): Pink, +12V: Black/White, Wire Length 300 mm		
ENVIRONMENT			
Ambient Temperature	Operating	-40°C to +55°C	
	Storage	-40°C to +85°C	
Relative Humidity Operating	10 to 90% RH (Non-Condensing)		
Environmental Locations	Dry / Damp		

## Applications



Floodlighting



High Bay Lighting



LED Streetlight



Area Lighting



Garage & Canopy

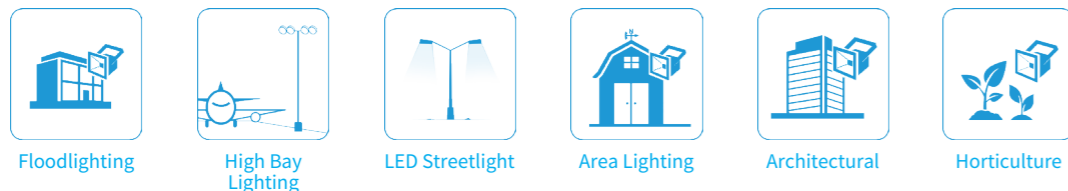
# USCO PRO



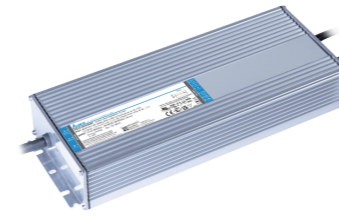
- Wide range constant current design
- Universal AC input voltage 110 - 277V<sub>AC</sub>
- With IP66/IP67 protection from most outdoor applications
- Adjustable constant current level via programmable tool
- Common mode 6kV/ differential mode 6kV surge immunity
- 0 - 10V dimming available

OUTPUT RATINGS	USCO-075140GA	USCO-100140GA	USCO-150140GC
Output Voltage Range	36 - 107 V <sub>DC</sub>	47 - 143 V <sub>DC</sub>	72 - 214 V <sub>DC</sub>
Max. No Load Output Voltage	120 Vrms	150 Vrms	250 Vrms
Output Power Range	75 W	100 W	150 W
Adjustable Output Current (AOC)	500 - 1400 mA	600 - 1400 mA	600 - 1400 mA
Line Regulation	± 1% (@ 110 - 277 V <sub>AC</sub> input)		
Load Regulation	± 3% (@ Min-Max output voltage)		
Output Current LF Ripple	5% (ripple = peak-average/average) at full load (<100Hz)		
INPUT RATINGS			
Input Voltage Range	99 - 305 V <sub>AC</sub>		
Input Frequency Range	47 - 63 Hz		
Max Input Current	110 V <sub>AC</sub> 0.8 A	1.04 A	1.67 A
Efficiency <sup>1)</sup>	230 V <sub>AC</sub> 92% @ 0.7 A	92.5% @ 0.7 A	93.0% @ 0.7 A
Inrush Current	230 V <sub>AC</sub> 65 A / 250 uS	65 A / 250 uS	110 A / 250 uS
Power Factor	> 0.98 @ 110/120 V <sub>AC</sub> , > 0.95 @ 230 V <sub>AC</sub> , > 0.92 @ 277 V <sub>AC</sub> & Full Load, > 0.90 @ 110/120/230 V <sub>AC</sub> & > 50% Load (277 V <sub>AC</sub> & > 70% Load)		
Leakage Current	< 0.7 mA peak @ 277 V <sub>AC</sub>		
MECHANICAL			
Casing	Aluminum, Color : Natural		
Dimensions (L x W x H)	174.0 x 68.0 x 37.0 mm 6.85 x 2.68 x 1.46 inch	220.0 x 68.0 x 37.0 mm 8.66 x 2.68 x 1.46 inch	
Unit Weight	0.85 kg (1.87 lb)	1.10 kg (2.42 lb)	
Cooling System	Convection		
Input Cable	Line: Brown, Neutral: Blue, PE: Yellow/Green, Cable Length 300 mm		
Output Cable	Positive: Brown, Negative: Blue, NTC/PRG: Black, Cable Length 300 mm		
Dimming Cable	Dim(+): Violet, Dim(-): Pink, +12V: Black/White, Cable Length 300 mm		
ENVIRONMENT			
Ambient Temperature	Operating	-40 °C to +60 °C	
	Storage	-40 °C to +85 °C	
Relative Humidity Operating	10 to 90% RH (Non-Condensing)		
Ingress Protection Classification	IP66 / IP67		

## Applications



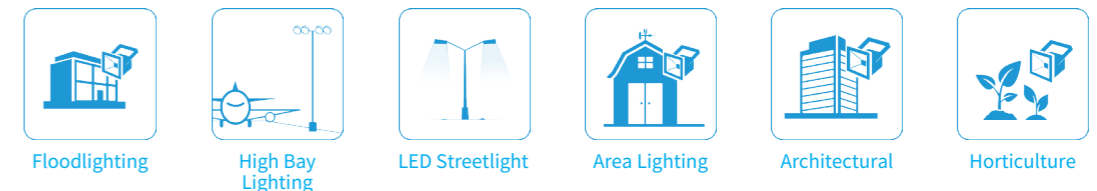
# USCO PRO



- Wide range constant current design
- Universal AC input voltage 110 - 277V<sub>AC</sub>
- With IP66/IP67 protection from most outdoor applications
- Adjustable constant current level via programmable tool
- Common mode 6kV/ differential mode 6kV surge immunity
- 0 - 10V dimming available

OUTPUT RATINGS	USCO-200140GA	USCO-250140GA	USCO-320210GA	USCO-320280GA	USCO-600400GA
Output Voltage Range	75 - 190 V <sub>DC</sub>	90 - 238 V <sub>DC</sub>	90 - 228 V <sub>DC</sub>	60 - 152 V <sub>DC</sub>	150 - 300 V <sub>DC</sub>
Max. No Load Output Voltage	230 Vrms	250 Vrms	250 Vrms	170 Vrms	380 Vrms
Output Power Range	200 W	250 W	320 W	320 W	600 W
Adjustable Output Current (AOC)	600-1400 mA	600-1400 mA	700-2100 mA	700-2800 mA	1000-3000 mA
Line Regulation	± 1% (@ 110-277 V <sub>AC</sub> input)				± 1% (@ 120-277 V <sub>AC</sub> input)
Load Regulation	± 3% (@ Min-Max output voltage)				
Output Current LF Ripple	5% (ripple = peak-average/average) at full load (<100Hz)				10%
INPUT RATINGS					
Input Voltage Range	99 - 305 V <sub>AC</sub>				108 - 305 V <sub>AC</sub>
Input Frequency Range	47 - 63 Hz				
Max Input <sup>1)</sup> Current	110 V <sub>AC</sub> 2.1 A	2.75 A	3.4 A	3.4 A	5.8 A
Efficiency	230 V <sub>AC</sub> 94.0% @ 1.05 A	94.5% @ 1.05 A	94.0% @ 1.4 A	94.0% @ 2.1 A	95.5% @ 2.0 A
Inrush Current	230 V <sub>AC</sub> 180 A / 200 uS	280 A / 150 uS	180 A / 250 uS	250 A / 250 uS	15 A
Power Factor	> 0.98 @ 110/120 V <sub>AC</sub> , > 0.95 @ 230 V <sub>AC</sub> , > 0.92 @ 277 V <sub>AC</sub> & Full Load, > 0.90 @ 110/120/230 V <sub>AC</sub> & > 50% Load (277 V <sub>AC</sub> & > 70% Load)				0.95 @ 120 - 277 V <sub>AC</sub> & Full load
Leakage Current	< 0.7 mA peak @ 277 V <sub>AC</sub>				
MECHANICAL					
Casing	Aluminum, Color : Natural				
Dimensions (L x W x H)	240.0 x 68.0 x 37.0 mm 9.45 x 2.68 x 1.46 inch	240.0 x 68.0 x 37.0 mm 9.45 x 2.68 x 1.46 inch	240.0 x 100.0 x 38.0 mm 9.45 x 3.94 x 1.50 inch		309 x 117 x 51 mm 12.1 x 4.6 x 2.0 inch
Unit Weight	1.20 kg (2.65 lb)	1.30 kg (2.87 lb)	1.85 kg (4.07 lb)		3 kg (6.6 lb)
Cooling System	Convection				
Input Cable	Line: Brown, Neutral: Blue, PE: Yellow/Green, Cable Length 300 mm				
Output Cable	Positive: Brown, Negative: Blue, NTC/PRG: Black, Cable Length 300 mm				
Dimming Cable	Dim(+): Violet, Dim(-): Pink, +12V: Black/White, Cable Length 300 mm				
ENVIRONMENT					
Ambient Temperature	Operating	-40 °C to +60 °C	-40 °C to +55 °C	-40 °C to +50 °C	-40 °C to +55 °C
	Storage	-40 °C to +85 °C		-40 °C to +90 °C	-40 °C to +85 °C
Relative Humidity Operating	10 to 90% RH (Non-Condensing)				
Ingress Protection Classification	IP66 / IP67				

## Applications



# USC4 PRO



- Main voltage design 277 - 480 V
- Adjustable constant current level via programmable tool
- IP67 rating for wet locations
- 6 kV surge immunity comply with ANSI C82.77-5 CAT C low
- 0-10V dimming available

OUTPUT RATINGS		USC4-320280GA	USC4-600400GA
Output Voltage Range		75 - 152 V <sub>DC</sub>	150 - 300 V <sub>DC</sub>
Max. No Load Output Voltage		170 V <sub>DC</sub>	350 V <sub>DC</sub>
Output Power Range		320 W	600 W
Adjustable Output Current (AOC)		700 - 2800 mA	1000 - 3000 mA
Current Accuracy		± 5% @ Typical output current range	
Line Regulation		± 1% @ 277-480V <sub>AC</sub> input	
Load Regulation		± 3% @ Min-Max output voltage	
Output Current LF Ripple		10% (ripple = peak-average/average) at full load	
INPUT RATINGS			
Input Voltage Range		250 - 528 V <sub>AC</sub>	
Input Frequency Range		47 - 63 Hz	
Max Input Current	277 V <sub>AC</sub>	1.1 A	2.4 A
Efficiency <sup>1)</sup>	277 V <sub>AC</sub>	92.5 %	94.8 %
	480 V <sub>AC</sub>	93 %	96 %
Inrush Current (Apk/50%-uS@Cold Start)		Meet NEMA410	
Power Factor		>0.95 @ Full Load , 277-480 V <sub>AC</sub>	
Leakage Current		<0.75 mArms	
MECHANICAL			
Casing		Aluminum, Color : Natural	
Dimensions (L x W x H)		9.45 x 3.94 x 1.50 inch	12.15 x 4.60 x 2.00 inch
Unit Weight		4.1 lb	6.6 lb
Input Connector		Line: Black, Neural: White, PE: Yellow/Green, Cable Length 300mm	
Output Connector		Positive: Brown, Negative: Blue, NTC/PRG: Black, Cable Length 300 mm (Black Cable Length 280 mm) Dim(+): Violet, Dim(-): Pink, +12V: Black/White, Cable Length 300 mm	
ENVIRONMENT			
Ambient Temperature	Operating	-40 °C to +55 °C	
	Storage	-40 °C to +85 °C	
Relative Humidity Operating		95 % non-condensing	
Environmental Locations		Dry, Damp and Wet locations	

## Applications



Floodlighting



Sports Lighting



Architectural



Horticulture



# Indoor LED Drivers



## Introduction

Indoor lighting applications are diverse and demand a wide variety of wattages and packages. An effective lighting solution can optimize the space and enhance the ambiance, both of which have a positive effect on the experience. Delta LED drivers are programmable and give the options of 0-10V or DALI-2 control, which allow Delta LED drivers to cover a broad range of indoor applications and ensure that indoor lighting will work at maximum performance and efficiency.

### Featured Products



#### USCT LINEAR

- Constant current design
- Universal input voltage 120 - 277V<sub>AC</sub>
- Class 2 output
- Programmable output current via the Delta interface
- Mini. dimming 1% of output current



#### USCI LINEAR

- Constant current design
- Universal input voltage 120 - 277V<sub>AC</sub>
- Class 2 and SELV output
- High output current for office or high bay application
- Min. dimming 10% of 0-10V / external resistor methods



#### EUCI MINI

- Programmable output current (DALI, I-programming)
- Built-in or independent type with clip-in strain-relief
- Dimming range 1 to 100 %
- High reliability by 5 years warranty

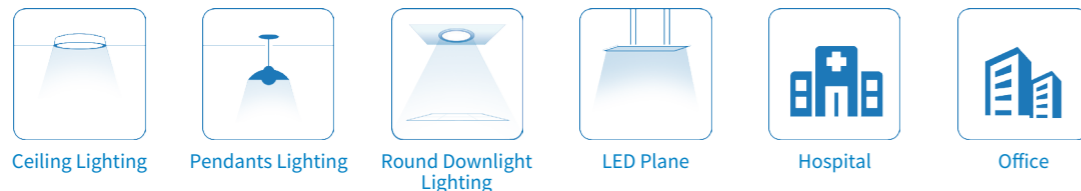


# USCT LINEAR

- Constant current design
- Universal input voltage 110 - 277V<sub>AC</sub>
- Class 2 output
- Programmable output current via the Delta interface
- Min. dimming 1% of output current

OUTPUT RATINGS		USCT-030105GA	USCT-050140GA	USCT-080210GA	USCT-040105LA	USCT-040105L2A
Nominal Output Current		150 - 1050 mA	350 - 1400 mA	700 - 2100 mA	350 - 1050mA	
Output Voltage Range		16 - 54 V <sub>DC</sub>		20 - 54 V <sub>DC</sub>	20 - 50 V <sub>DC</sub>	
Max. No Load Output Voltage		60 V <sub>DC</sub>				
Output Power Range		0 - 30 W	0 - 50 W	0.5 - 80 W	0 - 40W / 0 - 40W(CH1+CH2)	
Line Regulation		± 2 %			± 1 %	
Load Regulation		± 5 %			± 5 %	
Output Current Ripple		5% @full load (ripple = (pk-avg)/avg)			5% (ripple = pk-avg/avg) at full load	
INPUT RATINGS						
Input Voltage Range		108 - 305 V <sub>AC</sub>			99 - 305 V <sub>AC</sub>	
Input Frequency Range		47 - 63 Hz				
Normal Input Current		0.30A @ 120 - 277 V <sub>AC</sub>	0.48 A @ 120 - 277 V <sub>AC</sub>	0.77 A @ 120 - 277 V <sub>AC</sub>	0.43 - 0.2 A @ 110 - 277 V <sub>AC</sub>	
Efficiency <sup>1)</sup>	277 V <sub>AC</sub>	89.0 %	89.5 %	90.0 %	90 %	
Inrush Current (Apk / 50 %-uS) (Cold Start)		Meet NEMA 410			25 A / 250 uS @ 230 V <sub>AC</sub>	
Power Factor		> 0.95 @ 120 - 277 V <sub>AC</sub> , full load / 50 Hz			>0.9 @ full load	
Leakage Current		< 0.75 mA @ 277 V <sub>AC</sub>			<0.75 mA @ 277 V <sub>AC</sub>	
MECHANICAL						
Casing		Metal sheet, Color: Natural				
Dimensions (L x W x H)		11.0 x 1.2 x 1.0 inch (280.0 x 30.0 x 25.4 mm)	14.2 x 1.2 x 1.0 inch (360.0 x 30.0 x 25.4 mm)	11.0 x 1.2 x 1.0 inch 280 x 30 x 25.4 mm		
Unit weight [lb] / [kg]		0.81 lb (0.37 kg)	1.23 lb (0.56 kg)	0.55 lb (0.25 kg)		
Cooling System		Convection				
Input Connector		Terminal, 3-pole (Line/Neutral/PE), Conductor 18-16 AWG, Strip length 9 mm		Terminal, 2&3-pole (Line/Neutral)&(PE/ DALI1/DALI2), Conductor 18 - 16 mm <sup>2</sup> , Strip length 8.5~9.5mm		
Output Connector		Terminal, 6-pole (LED+/LED-/NTC_PRG+/NTC_PRG-/DIM+/DIM-)	Terminal, 5-pole (LED+/LED-/NTC_PRG/DIM+/DIM-)	Terminal, 4-pole (LED1+/LED1-/LED2+/LED2-), Conductor 18~16 mm <sup>2</sup> , Strip length 8.5~9.5mm		
		Conductor 18-16 AWG, Strip length 9 mm				
ENVIRONMENT						
Ambient Temperature	Operating	-30°C to +50 °C				
	Storage	-40°C to +85 °C			-30 °C to +85 °C	
Relative Humidity Operating		10 to 60 % RH (Non-Condensing)			10 to 90% RH (Non-Condensing)	
Environmental Locations		Dry and Damp				

## Applications

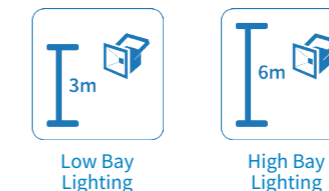


# USCI LINEAR

- Constant current design
- Universal input voltage 120 - 277V<sub>AC</sub>
- Class 2 and SELV output
- High output current for office or high-bay applications
- Min. dimming 10% of 0 - 10V / external resistor methods

OUTPUT RATINGS		USCI-100410DA
Output Voltage Range		15 - 24 V <sub>DC</sub>
Max. No Load Output Voltage		30 V <sub>DC</sub>
Output Power Range		62.3 - 99.6 W
Dimming Characteristic		0 - 10 V <sub>DC</sub> for 10 - 100%. Dimming frequency 1 kHz. Source current is 330 uA. 1) 0V (10%) - 8V (100%) 2) Dimming wires Open (100%) 3) Dimming wires Short (10%)
Current Accuracy		± 3 %
Line Regulation		± 5 %
Load Regulation		± 5 %
Output Current LF Ripple		5% @full load (ripple = (pk-avg)/avg)
INPUT RATINGS		
Input Voltage Range		108 - 305 V <sub>AC</sub>
Input Frequency Range		47 - 63 Hz
Max Input Current	120 V <sub>AC</sub>	1.20 A
Efficiency <sup>1)</sup>	277 V <sub>AC</sub>	86.0 %
Inrush Current (Apk / 50 %- uS @ Cold Start)		200A/250 us, Meet NEMA 410
Power Factor		Full Load: > 0.95 @ 120 - 277 V <sub>AC</sub>
Leakage Current		< 0.75 mA @ 277 V <sub>AC</sub>
MECHANICAL		
Casing		Metal sheet, Color: Black
Dimensions (L x W x H)		9.5 x 1.7 x 1.2 inch 241.3 x 43.1 x 30.0 mm
Unit Weight		1.50 lb (0.68 kg)
Input Wire		Line: Black, Neutral: White, Wires Length 300 mm
Output Wire		Positive: Red, Negative: Black, Dim+: Violet, Dim-: Gray, Wires Length 300 mm
ENVIRONMENT		
Ambient Temperature	Operating	-40°C to +55 °C
	Storage	-40°C to +85 °C
Relative Humidity Operating		10 to 90 % RH (Non-Condensing)
Environmental Locations		Dry and Damp

## Applications





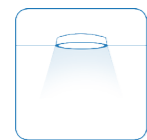
# EUCI MINI

- Programmable output current (DALI, I-programming)
- Built-in or independent type with clip-in strain-relief
- Dimming range 1 to 100%
- High reliability by 5 years warranty

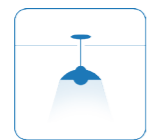


OUTPUT RATINGS		EUCI-020070 GLA	EUCI-020070 GLAB
Nominal Output Current		250 - 700 mA	
Output Voltage Range		24 - 54 V <sub>DC</sub>	
Max. No Load Output Voltage		60 V <sub>DC</sub>	
Output Power Range		6 - 20 W	
Line Regulation		± 1 %	
Load Regulation		± 5 %	
Output Current Ripple		5 % @full load (ripple = (pk-avg)/avg)	
INPUT RATINGS			
Input Voltage Range		198 - 264 V <sub>AC</sub> ; 176 - 280 V <sub>DC</sub>	
Input Frequency Range		47 - 63 Hz	
Normal Input Current		0.13 A @ 220 - 240 V <sub>AC</sub> 0.11 A @ 220 - 240 V <sub>DC</sub>	
Efficiency <sup>1)</sup>	230 V <sub>AC</sub>	86 %	
Inrush Current (Apk / 50%-uS) (Cold Start)		20 A/150 uS @ 230 V <sub>AC</sub>	
Power Factor		>0.95 @ 230 V <sub>AC</sub> / 50 Hz	
Leakage Current		< 0.7 mA @ 230 V <sub>AC</sub>	
MECHANICAL			
Casing		Plastic, Color : White	
Dimensions (L x W x H)		Built-in (GLAB model) : 97.0 x 43.0 x 30.0 mm 3.82 x 1.69 x 1.18 inch	Independent (GLAB model) : 147.0 x 43.0 x 30.0 mm 5.79 x 1.69 x 1.18 inch
Unit Weight		Built-in (GLAB model) : 0.16 kg (0.35 lb) / Independent (GLAB model) : 0.19 kg (0.42 lb)	
Cooling System		Convection	
Input Connector		Terminal, 6-pole (Neutral/Line/DALI1/DALI2/GND/PRG), Conductor 0.75~1.5 mm <sup>2</sup> , Strip length 8.5...9.5 mm	
Output Connector		Terminal, 2-pole (Positive/Negative), Conductor 0.75~1.5 mm <sup>2</sup> , Strip length 8.5...9.5 mm	
ENVIRONMENT			
Ambient Temperature	Operating	-25 °C to +50 °C	
	Storage	-40 °C to +85 °C	
Relative Humidity Operating		10 to 60 % RH (Non-Condensing)	
Ingress Protection Classification		IP20	

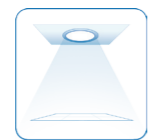
## Applications



Ceiling Lighting



Pendants Lighting



Round Downlight Lighting



Hospital



Office





# Signage & Refrigeration LED Drivers



## Introduction

To stand out in information-saturated environment, appealing signage is key to catching audiences' eye and increasing brand or product awareness. Combining years of experience in powering signage lights with our comprehensive Class 2 product portfolio, Delta LED drivers for signage applications enhance the visibility of the signs and the attractiveness of goods. It can be customized to suit different shape, color, and purpose in signage and refrigeration applications.

### Featured Products



#### USVI S12 / S24

- 12V / 24V constant voltage output design
- Universal input voltage 120 - 277V<sub>AC</sub>
- Multi-Channel output and independent operating
- UL Class 2 output
- Fixed / Dimming output available



#### USVI RDL

- 24V constant voltage output design
- Universal input voltage 120 - 277V<sub>AC</sub>
- Design for refrigeration display lighting applications
- Safety-certificated for household & refrigerator appliances



#### JPVO S12 / S24

- 12V / 24V constant voltage output design
- AC input voltage 100/200/242V<sub>AC</sub> for Japan application
- PSE Clause 1, meet JIS C 61000-3-2 Class C
- IP67 ingress protection



#### JPVI S12 / S24

- 12V / 24V constant voltage output design
- AC input voltage 100/200/242V<sub>AC</sub> for Japan application
- PSE Clause 1, meet JIS C 61000-3-2 Class C
- 10mm structure elevated to meet indoor wiring regulation
- IP54 Ingress protection

# USVI S12



- Constant voltage design
- Universal input voltage 120-277V<sub>AC</sub>
- Multi-Channel output and independent operating
- Class 2 output
- Wide operating temperature range -40°C to +55°C
- Dry & Damp location rated for signage application

OUTPUT RATINGS	USVI-020012FA	USVI-060012FG	USVI-060012DG
Nominal Output Voltage	12V <sub>DC</sub>		
Output Channel	1	1	1
Max. Output Power	20W	60W	60W
Line Regulation	± 1%		
Load Regulation	± 3%		
Output Ripple Voltage	< 360 mVp-p	< 1000 mVp-p	< 1000 mVp-p
INPUT RATINGS			
Input Voltage Range	90 - 305 V <sub>AC</sub>	108 - 305 V <sub>AC</sub>	108 - 305 V <sub>AC</sub>
Input Frequency Range	47-63 Hz		
Input Current Max	0.27 A	0.60 A	0.60 A
Efficiency <sup>1)</sup>	80.0% @ 277 V <sub>AC</sub>	90.0% @ 277 V <sub>AC</sub>	90.0% @ 277 V <sub>AC</sub>
Inrush Current Peak >50% Duration	27 A / 250 uS	70 A / 250 uS	70 A / 250 uS
Power Factor @ max. Load.	> 0.9	> 0.95	> 0.95
Leakage Current	< 0.75 mA @ 277 V <sub>AC</sub>		
MECHANICAL			
Casing	Plastic, Color : White	Metal sheet, Color : White	Metal sheet, Color : White
Dimensions (L x W x H)	5.20 x 1.34 x 1.00 inch 132.0 x 34.0 x 25.4 mm	5.83 x 1.80 x 1.00 inch 148.2 x 45.6 x 25.4 mm	5.83 x 1.80 x 1.00 inch 148.2 x 45.6 x 25.4 mm
Unit Weight	0.18 kg (0.40 lb)	0.34 kg (0.75 lb)	0.34 kg (0.75 lb)
Cooling System	Convection		
Input Wire	Line: Black, Neutral: White, Wire Length 300mm		
Output Wire	Positive: Red, Negative: Blue Wires Length 300 mm	Positive: Red, Negative: Blue Wires Length 300 mm	Dim+: Violet, Dim-:Pink Positive: Red, Negative: Blue Wires Length 300 mm
ENVIRONMENT			
Ambient Temperature	Operating	-40°C to +60°C	-40°C to +55°C
	Storage	-40°C to +85°C	
Relative Humidity Operating	10 to 90% RH (Non-Condensing)		
Environmental Locations	UL Dry & Damp		

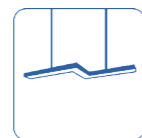
## Applications



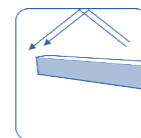
LED Signage



Retail Display Lighting



Linear Accent Lighting



Indirect Lighting

# USVI S12



- Constant voltage design
- Universal input voltage 120-277V<sub>AC</sub>
- Multi-Channel output and independent operating
- Class 2 output
- Wide operating temperature range -40°C to +55°C
- Dry & Damp location rated for signage application

OUTPUT RATINGS	USVI-060012FF	USVI-060012FH	USVI-120012FA	USVI-180012FA
Nominal Output Voltage	12V <sub>DC</sub>			
Output Channel	1	1	2	3
Max. Output Power	60W			
Line Regulation	± 1%			
Load Regulation	± 3%			
Output Ripple Voltage	< 1000 mVp-p			
INPUT RATINGS				
Input Voltage Range	108 - 305 V <sub>AC</sub>			
Input Frequency Range	47 - 63 Hz			
Input Current Max	1.20 A	0.59 A	1.30 A	1.90 A
Efficiency <sup>1)</sup>	86.0% @ 277 V <sub>AC</sub>	85.7% @ 277 V <sub>AC</sub>	88.5% @ 277 V <sub>AC</sub>	89.0% @ 277 V <sub>AC</sub>
Inrush Current Peak >50% Duration	120 V <sub>AC</sub>	40 A / 160 uS	40 A / 190 uS	40 A / 190 uS
	277 V <sub>AC</sub>	105 A / 160 uS	76 A / 205 uS	76 A / 205 uS
Power Factor at 100% Load	> 0.5 @ 120 V <sub>AC</sub>	> 0.95 @ 120 - 277 V <sub>AC</sub>		
Leakage Current	< 0.75 mA @ 277 V <sub>AC</sub>			
MECHANICAL				
Casing	Metal sheet, Color : White			
Dimensions (L x W x H)	5.50 x 1.70 x 1.18 inch 140.0 x 43.0 x 30.0 mm	6.50 x 1.70 x 1.18 inch 165.1 x 43.0 x 30.0 mm	11.75 x 1.70 x 1.18 inch 298.5 x 43.0 x 30.0 mm	16.70 x 1.70 x 1.18 inch 424.2 x 43.0 x 30.0 mm
Unit Weight	0.35 kg (0.77 lb)	0.38 kg (0.841 lb)	0.72 kg (1.59 lb)	1.18 kg (2.60 lb)
Cooling System	Convection			
Input Wire	Line: Black, Neutral: White, Wire Length 12.5 inch (317 mm)			
Output Wire	Positive: Red, Negative: Black Wire Length 12.5 inch (317 mm)	Positive: Red, Negative: Red/White Wire Length 12.5 inch (317 mm) Positive: Blue, Negative: Blue/White Wires Length 18.5 inch (470 mm)	Positive: Red, Negative: Red/White, Wire Length 12.5 inch (317 mm) Positive: Blue, Negative: Blue/White Wires Length 18.5 inch (470 mm)	Positive: Red, Negative: Red/White, Wire Length 12.5 inch (317 mm) Positive: Blue, Negative: Blue/White Wires Length 18.5 inch (470 mm) Positive: Yellow, Negative: Yellow/White Wires Length 24.5 inch (623 mm)
ENVIRONMENT				
Ambient Temperature	Operating	-40°C to +55°C		
	Storage	-40°C to +85°C		
Relative Humidity Operating	10 to 90% RH (Non-Condensing)			
Environmental Locations	UL Dry & Damp			

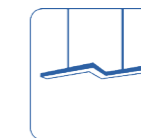
## Applications



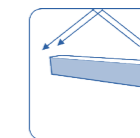
LED Signage



Retail Display Lighting



Linear Accent Lighting



Indirect Lighting

# USVI S24



- Constant voltage design
- Universal input voltage 120-277V<sub>AC</sub>
- Multi-Channel output and independent operating
- Class 2 output
- Wide operating temperature range -40°C to +55°C
- Dry & Damp location rated for signage application

OUTPUT RATINGS	USVI-020024FA	USVI-060024FG	USVI-060024DG	USVI-060024FH
Nominal Output Voltage	24V <sub>DC</sub>			
Output Channel	1			
Max. Output Power	20 W	60 W		
Line Regulation	± 1 %			
Load Regulation	± 3 %			
Output Ripple Voltage	< 720 mVp-p	< 500 mVp-p	< 400 mVp-p	
INPUT RATINGS				
Input Voltage Range	90 - 305 V <sub>AC</sub>	108 - 305 V <sub>AC</sub>		
Input Frequency Range	47-63 Hz			
Input Current Max	0.27 A	0.58 A	0.59 A	
Efficiency <sup>1)</sup>	80.0% @ 277 V <sub>AC</sub>	90.0% @ 277 V <sub>AC</sub>	87.0% @ 277 V <sub>AC</sub>	
Inrush Current Peak >50% Duration	32 A / 150 uS	70 A / 250 uS	50 A / 250 uS	
Power Factor @ max. Load.	> 0.9	> 0.95		> 0.95
Leakage Current	< 0.75 mA @ 277 V <sub>AC</sub>			
MECHANICAL				
Casing	Plastic, Color : White	Metal sheet, Color : White		Metal sheet, Color : White
Dimensions (L x W x H)	5.20 x 1.34 x 1.00 inch 132.0 x 34.0 x 25.4 mm	5.83 x 1.80 x 1.00 inch 148.2 x 45.6 x 25.4 mm	9.50x1.70x1.18 inch 241.3x43.1x30.0 mm	
Unit Weight	0.18 kg (0.40 lb)	0.34 kg (0.75 lb)	0.60 kg (1.32 lb)	
Cooling System	Convection			
Input Wire	Line: Black, Neutral: White, Wire Length 300 mm			
Output Wire	Positive: Red, Negative: Blue Wires Length 300 mm	Dim+: Violet, Dim-: Pink Positive: Red, Negative: Blue Wires Length 300 mm	Positive: Red, Negative: Black Wires Length 300 mm	
ENVIRONMENT				
Ambient Temperature	Operating	-40°C to +60°C	-40°C to +55°C	-40°C to +55°C
	Storage	-40°C to +85°C		
Relative Humidity Operating	10 to 90 % RH (Non-Condensing)			
Environmental Locations	UL Dry & Damp			

## Applications



# USVI S24



- Constant voltage design
- Universal input voltage 120-277V<sub>AC</sub>
- Multi-Channel output and independent operating
- Class 2 output
- Wide operating temperature range -40°C to +55°C
- Dry & Damp location rated for signage application

OUTPUT RATINGS	USVI-100024DG	USVI-100024FG/FE	USVI-100024FH	USVI-200024FA
Nominal Output Voltage	24V <sub>DC</sub>			
Output Channel	1	1	1	2
Max. Output Power	99.6 W		96 W	
Line Regulation	± 1 %			
Load Regulation	± 3 %			
Output Ripple Voltage	< 500 mVp-p		< 400 mVp-p	< 500 mVp-p
INPUT RATINGS				
Input Voltage Range	108 - 305 V <sub>AC</sub>			
Input Frequency Range	47 - 63 Hz			
Input Current Max	0.95 A		0.91 A	1.83 A
Efficiency <sup>1)</sup>	89.0% @ 277 V <sub>AC</sub>	90.5% @ 277 V <sub>AC</sub>	90.0% @ 277 V <sub>AC</sub>	90.5% @ 277 V <sub>AC</sub>
Inrush Current Peak >50% Duration	150 A / 250 uS		70 A / 200 uS	170 A / 110 uS
Power Factor @ max. Load.	> 0.95			
Leakage Current	< 0.75 mA @ 277 V <sub>AC</sub>			
MECHANICAL				
Casing	Metal sheet, Color : White			
Dimensions (L x W x H)	9.50 x 1.70 x 1.00 inch 241.3 x 43.1 x 25.4 mm	9.50 x 1.70 x 1.18 inch 241.3 x 43.1 x 30.0 mm	16.70 x 1.70 x 1.18 inch 424.0 x 43.1 x 30.0 mm	
Unit Weight	0.49 kg (1.08 lb)		0.60 kg (1.32 lb)	1.18 kg (2.6 lb)
Cooling System	Convection			
Input Wire	Line: Black, Neutral: White, Wire Length 300 mm		Line: Black, Neutral: White, Wire Length 12.5 inch (317 mm)	
Output Wire	Dim+: Violet, Dim-: Pink Positive: Red, Negative: Blue Wires Length 300 mm	Positive: Red, Negative: Blue Wires Length 300 mm	Positive: Red, Negative: Black Wires Length 300 mm	Positive: Red, Negative: Red/White Wire Length 12.5 inch (317 mm) Positive: Blue, Negative: Blue/White Wires Length 18.50 inch (470 mm)
ENVIRONMENT				
Ambient Temperature	Operating	-40°C to +55°C		
	Storage	-40°C to +85°C		
Relative Humidity Operating	10 to 90 % RH (Non-Condensing)			
Environmental Locations	UL Dry & Damp			

## Applications



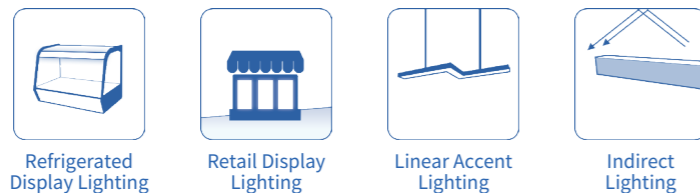


# USVI RDL

- Constant voltage design
- Universal input voltage 120-277V<sub>AC</sub>
- Safety-certificated for household and refrigerator appliances
- Class 2 output
- Dry & Damp location rated

OUTPUT RATINGS		USVI-020024FR	USVI-060024FR	USVI-080024FR1	USVI-100024FR1	USVI-240024FR
Nominal Output Voltage		24 V <sub>DC</sub>				
Output Current Range		0.05 – 0.83A	0.1 - 2.50 A	0.1 - 3.30 A	0.1 - 4.00 A	0.1 – 10.00A
Max. Output Power		20W	60 W	80 W	96 W	240W
Line Regulation		± 1 %				
Load Regulation		± 3 %				
Output Ripple Voltage		< 400 mVp-p				
INPUT RATINGS						
Input Voltage Range		198 – 264 V <sub>AC</sub>	108 - 305 V <sub>AC</sub>			198 – 264V <sub>AC</sub>
Input Frequency Range		47 - 63 Hz				
Max Input Current		0.2 A	0.59 A	0.76 A	0.91 A	1.12 A
Efficiency	230 V <sub>AC</sub>	84%	87%	90%		92.5%
Power Factor		0.5 min	>0.9			
Touch Current		< 0.70 mA @ 230 V <sub>AC</sub>				
MECHANICAL						
Casing		Plastic, Color: Black	Metal sheet, Color: Black			
Dimensions (L x W x H)		5.2 x 1.34 x 1.18 inch 132 x 34 x 25.4 mm	9.50 x 1.70 x 1.18 inch 241.3 x 43.1 x 30.0 mm			9.45 x 2.75 x 1.48 inch 240 x 70 x 37.5 mm
Unit Weight		0.1kg ( 0.22lb)	0.6 kg (1.3 lb)		1.04kg ( 2.28lb)	
Cooling System		Convection				
Input Wire		Line: Black, Neutral: White, Wires Length 300 mm				
Output Wire		Positive: Red, Negative: Black, Wires Length 300 mm				
ENVIRONMENT						
Ambient Temperature	Operating	-40 ° C to +60 ° C	-40 ° C to +55 ° C			
	Storage	-40 ° C to +85 ° C				
Relative Humidity Operating		10 to 90 % RH (Non-Condensing)				

## Applications



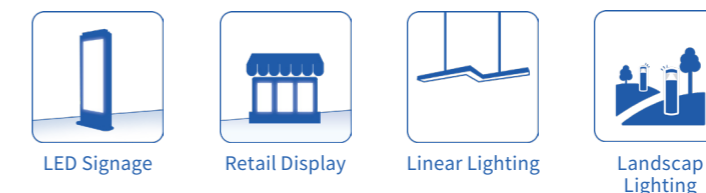
# JPVO S12



- Constant voltage design
- Meet JIS C 61000-3-2 Class C
- Meets CISPR J15
- Wide operating temperature range -40 °C to 55 °C
- IP67 ingress protection

OUTPUT RATINGS		JPVO-030012FA	JPVO-060012FA	JPVO-100012FA	JPVO-150012FA
Nominal Output Voltage		12 V <sub>DC</sub>			
Output Current Range		0.1 - 2.5 A	0.1 - 5.0 A	0.1 – 8.3 A	0.1 – 12.5 A
Max. Output Power		30 W	60 W	100W	150W
Line Regulation		± 1%			
Load Regulation		± 5%			
Output Ripple Voltage		<500mVp-p			
INPUT RATINGS					
Input Voltage Range		90-266 V <sub>AC</sub>			
Input Frequency Range		47-63 Hz			
Normal Input Current		0.37 A @100V <sub>AC</sub> 0.18 A @200V <sub>AC</sub> 0.16 A @242V <sub>AC</sub>	0.72 A @100V <sub>AC</sub> 0.35 A @200V <sub>AC</sub> 0.30 A @242V <sub>AC</sub>	1.20 A @100 V <sub>AC</sub> 0.60 A @200 V <sub>AC</sub> 0.50 A @242 V <sub>AC</sub>	1.70 A @100 V <sub>AC</sub> 0.85 A @200 V <sub>AC</sub> 0.70 A @242 V <sub>AC</sub>
Efficiency <sup>1)</sup>		82.9 % @100 V <sub>AC</sub> 85.3 % @200 V <sub>AC</sub> 85.1 % @242 V <sub>AC</sub>	82.4 % @100 V <sub>AC</sub> 84.8 % @200 V <sub>AC</sub> 85.2 % @242 V <sub>AC</sub>	87.9 % @100 V <sub>AC</sub> 91.3 % @200 V <sub>AC</sub> 91.5 % @242 V <sub>AC</sub>	88.1 % @100 V <sub>AC</sub> 91.8 % @200 V <sub>AC</sub> 91.7 % @242 V <sub>AC</sub>
Max Inrush Current		25A @ 100Vac and 60A @ 242Vac at cold start		35A @ 100Vac and 80A @ 242 V <sub>AC</sub> at cold start	40A @ 100Vac and 90A @ 242 V <sub>AC</sub> at cold start
Power Factor at 100 % load		> 0.90 @full load			
Leakage Current		< 0.7 mA			
MECHANICAL					
Casing		Aluminum, Color : Natural			
Dimensions (L x W x D) [mm] / [inch]		220.0 x 60.0 x 34.0mm		240.0 x 60.0 x 34.0mm	280.0 x 70.0 x 37.5 mm
Unit weight [lb] / [kg]		0.75kg		0.81kg	1.25kg
Cooling System		Convection			
Input Cable		Rubber cable(PNCTF type), Line: Black, Neutral: White, PE: Green/Yellow, cable length 160 mm			
Output Cable		Rubber cable(SJOW type), Positive: Red, Negative: Black, cable length 160 mm			
ENVIRONMENT					
Ambient Temperature	Operating	-40 °C to +55 °C			
	Storage	-40 °C to +85 °C			
Relative Humidity Operating		10 to 90 % RH (Non-Condensing)			

## Applications



# JPVO S24

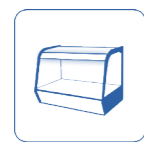


- Constant voltage design
- Meet JIS C 61000-3-2 Class C
- Wide operating temperature range -40°C to 55°C
- Multi-channel independent LED operation
- IP67 ingress protection



OUTPUT RATINGS	JPVO-030024FA	JPVO-060024FA	JPVO-090024FA
Nominal Output Voltage	24V <sub>DC</sub>		
Output Current Range	0.1 - 1.25A	0.1 - 2.5A	0.1 - 3.75A
Output Channel	1		
Max. Output Power	30W	60W	90W
Line Regulation	± 1%		
Load Regulation	± 5%		
Output Ripple Voltage	<400mVp-p		
INPUT RATINGS			
Input Voltage Range	90 - 266V <sub>AC</sub>		
Input Frequency Range	47 - 63Hz		
Normal Input Current	0.35A @100V <sub>AC</sub> 0.18A @200V <sub>AC</sub> 0.15A @242V <sub>AC</sub>	0.70A @100V <sub>AC</sub> 0.35A @200V <sub>AC</sub> 0.30A @242V <sub>AC</sub>	1.10A @100V <sub>AC</sub> 0.52A @200V <sub>AC</sub> 0.45A @242V <sub>AC</sub>
Efficiency <sup>1)</sup>	86.7% @100V <sub>AC</sub> 88.6% @200V <sub>AC</sub> 88.6% @242V <sub>AC</sub>	88.0% @100V <sub>AC</sub> 90.7% @200V <sub>AC</sub> 90.7% @242V <sub>AC</sub>	87.5% @100V <sub>AC</sub> 90.6% @200V <sub>AC</sub> 90.6% @242V <sub>AC</sub>
Max Inrush Current	25A @ 100V <sub>AC</sub> and 60A @ 242V <sub>AC</sub> at cold start		
Power Factor at 100% load	> 0.9 @ full load		
Leakage Current	< 0.7 mA		
MECHANICAL			
Casing	Aluminum, Color : Natural		
Dimensions (L x W x H)	200.0 x 60.0 x 34.0 mm		220.0 x 60.0 x 34.0 mm
Unit Weight	0.64 kg		0.72 kg
Cooling System	Convection		
Input Cable	Rubber cable(PNCTF type), Line: Black, Neutral: White, PE: Green/Yellow, cable length 160 mm		
Output Cable	Rubber cable(SJOW type), Positive: Red, Negative: Black, cable length 160 mm		
ENVIRONMENT			
Ambient Temperature	Operating	-40°C to +55°C	
	Storage	-40°C to +85°C	
Relative Humidity Operating	10 to 90% RH (Non-Condensing)		

## Applications



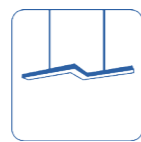
Refrigerated Display lighting



Retail Display Lighting



LED Signage



Linear Accent Lighting



Landscape Lighting

# JPVO S24



- Constant voltage design
- Meet JIS C 61000-3-2 Class C
- Wide operating temperature range -40°C to 55°C
- Multi-channel independent LED operation
- IP67 ingress protection



OUTPUT RATINGS	JPVO-150024FA	JPVO-200024FA	JPVO-300024FA
Nominal Output Voltage	24V <sub>DC</sub>		
Output Current Range	0.1 - 6.25A	0.1 - 4.16A	0.1 - 6.25A
Output Channel	1	2	
Max. Output Power	150W	200W	300W
Line Regulation	± 1%		
Load Regulation	± 5%		
Output Ripple Voltage	<400mVp-p		
INPUT RATINGS			
Input Voltage Range	90 - 266V <sub>AC</sub>		
Input Frequency Range	47 - 63Hz		
Normal Input Current	1.70A @100V <sub>AC</sub> 0.85A @200V <sub>AC</sub> 0.70A @242V <sub>AC</sub>	2.35A @100V <sub>AC</sub> 1.10A @200V <sub>AC</sub> 0.97A @242V <sub>AC</sub>	3.38A @100V <sub>AC</sub> 1.42A @200V <sub>AC</sub> 1.36A @242V <sub>AC</sub>
Efficiency <sup>1)</sup>	87.8% @100V <sub>AC</sub> 91.8% @200V <sub>AC</sub> 91.8% @242V <sub>AC</sub>	87.2% @100V <sub>AC</sub> 91.5% @200V <sub>AC</sub> 91.5% @242V <sub>AC</sub>	89.0% @100V <sub>AC</sub> 91.5% @200V <sub>AC</sub> 91.5% @242V <sub>AC</sub>
Max Inrush Current	25A @ 100V <sub>AC</sub> and 60A @ 242V <sub>AC</sub> at cold start	60A @ 100V <sub>AC</sub> and 120A @ 242V <sub>AC</sub> at cold start	60A @ 100V <sub>AC</sub> and 135A @ 242V <sub>AC</sub> at cold start
Power Factor at 100% load	> 0.9 @ full load		
Leakage Current	< 0.7 mA		
MECHANICAL			
Casing	Aluminum, Color : Natural		
Dimensions (L x W x H)	240.0 x 60.0 x 34.0 mm	220.0 x 100.0 x 38.0 mm	280.0 x 100.0 x 38.0 mm
Unit Weight	0.79 kg	1.40 kg	1.80 kg
Cooling System	Convection		
Input Cable	Rubber cable(PNCTF type), Line: Black, Neutral: White, PE: Green/Yellow, cable length 160 mm		
Output Cable	Rubber cable(SJOW type), Positive: Red, Negative: Black, cable length 160 mm		
ENVIRONMENT			
Ambient Temperature	Operating	-40°C to +55°C	-40°C to +40°C
	Storage	-40°C to +85°C	
Relative Humidity Operating	10 to 90% RH (Non-Condensing)		

## Applications



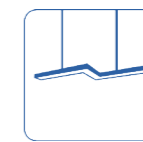
Refrigerated Display lighting



Retail Display Lighting



LED Signage



Linear Accent Lighting



Landscape Lighting



# JPVI S12

- Constant voltage design
- Meet JIS C 61000-3-2 Class C
- Meets CISPR J15
- 10mm structure elevated to meet indoor wiring regulation.
- IP54 Ingress protection



OUTPUT RATINGS		JPVI-020012FA	JPVI-060012FK	JPVI-100012FK	JPVI-150012FK
Nominal Output Voltage		12V <sub>DC</sub>			
Output Current Range		0.1 - 1.7 A	0.1 - 5.0 A	0.1 - 8.3 A	0.1 - 12.5 A
Max. Output Power		20 W	60 W	100W	150W
Line Regulation		± 1%			
Load Regulation		± 5%			
Output Ripple Voltage		<360 mVp-p	<500 mVp-p	<500 mVp-p	<500 mVp-p
INPUT RATINGS					
Input Voltage Range		90-266 V <sub>AC</sub>			
Input Frequency Range		47-63 Hz			
Normal Input Current		0.24 A @100 V <sub>AC</sub> 0.12 A @200 V <sub>AC</sub> 0.10 A @242 V <sub>AC</sub>	0.72 A @100 V <sub>AC</sub> 0.36 A @200 V <sub>AC</sub> 0.30 A @242 V <sub>AC</sub>	1.20 A @100 V <sub>AC</sub> 0.60 A @200 V <sub>AC</sub> 0.50 A @242 V <sub>AC</sub>	1.70 A @100 V <sub>AC</sub> 0.85 A @200 V <sub>AC</sub> 0.70 A @242 V <sub>AC</sub>
Efficiency <sup>1)</sup>		83.0 % @100 V <sub>AC</sub> 82.0 % @200 V <sub>AC</sub> 82.0 % @242 V <sub>AC</sub>	82.0 % @100 V <sub>AC</sub> 85.7 % @200 V <sub>AC</sub> 85.8 % @242 V <sub>AC</sub>	87.4 % @100 V <sub>AC</sub> 90.8 % @200 V <sub>AC</sub> 91.1 % @242 V <sub>AC</sub>	87.8 % @100 V <sub>AC</sub> 91.1 % @200 V <sub>AC</sub> 91.5 % @242 V <sub>AC</sub>
Max Inrush Current		27A / 250.µS	25 A @ 100 V <sub>AC</sub> and 60 A @ 242 V <sub>AC</sub> at cold start	35A @ 100V <sub>AC</sub> and 80A @ 242V <sub>AC</sub> at cold start	40A @ 100Vac and 90A @ 242V <sub>AC</sub> at cold start
Power Factor		> 0.9 @ full load			
Leakage Current		< 0.7 mA			
MECHANICAL					
Casing		Plastic	Metal Sheet		
Dimensions (L x W x D) [mm] / [inch]		132.0 x 34.0 x 25.4 mm	241.3 x 43.0 x 40.5 mm	241.3 x 60.0 x 40.5mm	280.0 x 60.0 x 40.5mm
Unit weight [lb] / [kg]		0.18 Kg	0.55 Kg	0.77kg	0.96kg
Cooling System		Convection			
Input Cable		Line: Black, Neutral: White, Wires Length 300 mm			
Output Cable		Positive: Red Negative: Blue Wires length 300mm	Positive: Red, Negative: Black, wires length 300mm		
ENVIRONMENT					
Ambient Temperature	Operating	-10 °C to +60 °C	-10 °C to +40 °C	-10 °C to +40 °C	-10 °C to +40 °C
	Storage	-40°C to +85°C			
Relative Humidity Operating	Operating	10 to 90 % RH (Non-Condensing)			
	Storage	5 to 95 % RH (Non-Condensing)			
Ingress Protection Classification		IP54			

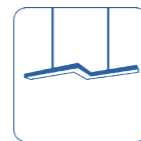
## Applications



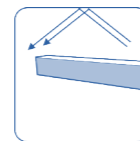
LED Signage



Retail Display Lighting



Linear Accent Lighting



Indirect Lighting



# JPVI S24

- Constant voltage design
- Meets JIS C 61000-3-2 Class C
- Up to 90% efficiency for 60W, 100W and 150W
- 10mm structure elevated to meet indoor wiring regulation
- IP54 Ingress protection



OUTPUT RATINGS		JPVI-020024FA	JPVI-060024FA/FK	JPVI-100024FA/ FK	JPVI-150024FK
Nominal Output Voltage		24V <sub>DC</sub>			
Output Current Range		0.1 - 0.83 A	0.1 - 2.5 A	0.1 - 4.17 A	0.1 - 6.25 A
Max. Output Power		20 W	60 W	100 W	150 W
Line Regulation		± 1%			
Load Regulation		± 5%			
Output Ripple Voltage		<720 mVp-p	<400 mVp-p		
INPUT RATINGS					
Input Voltage Range		90 - 305 V <sub>AC</sub>	90 - 266 V <sub>AC</sub>		
Input Frequency Range		47 - 63 Hz			
Normal Input Current		0.24 A @100 V <sub>AC</sub> 0.12 A @200 V <sub>AC</sub> 0.10 A @242 V <sub>AC</sub>	0.70 A @100 V <sub>AC</sub> 0.35 A @200 V <sub>AC</sub> 0.30 A @242 V <sub>AC</sub>	1.13 A @100 V <sub>AC</sub> 0.55A @200 V <sub>AC</sub> 0.46 A @242 V <sub>AC</sub>	1.70 A @100 V <sub>AC</sub> 0.85 A @200 V <sub>AC</sub> 0.70 A @242 V <sub>AC</sub>
Efficiency <sup>1)</sup>		84.8 % @100 V <sub>AC</sub> 81.3 % @200 V <sub>AC</sub> 81.3 % @242 V <sub>AC</sub>	87.2 % @100 V <sub>AC</sub> 90.0 % @200 V <sub>AC</sub> 90.0 % @242 V <sub>AC</sub>	87.5 % @100 V <sub>AC</sub> 90.7 % @200 V <sub>AC</sub> 91.0 % @242 V <sub>AC</sub>	88.2 % @100 V <sub>AC</sub> 91.9 % @200 V <sub>AC</sub> 91.9 % @242 V <sub>AC</sub>
Max Inrush Current		32A / 150 µS	25 A @ 100 V <sub>AC</sub> and 60 A @ 242 V <sub>AC</sub> at cold start		
Power Factor at 100 % load		> 0.9 @ full load			
Leakage Current		< 0.7 mA			
MECHANICAL					
Casing		Plastic	Metal sheet		Aluminum sheet
Dimensions (L x W x H)		132.0 x 34.0 x 25.4 mm	241.3 x 43.0 x 30.5 mm (FA), 241.3 x 43.0 x 40.5 mm (FK)		241.3 x 60.0 x 41.5 mm
Unit Weight		0.18 kg	0.55 kg		0.80 kg
Cooling System		Convection			
Input Wire		Line: Black, Neutral: White, Wires Length 300 mm			
Output Wire		Positive: Red, Negative: Blue Wires Length 300 mm	Positive: Red, Negative: Black, Wires Length 300 mm		
ENVIRONMENT					
Ambient Temperature	Operating	-10°C to +60 °C	-10°C to +55 °C	-10°C to +40 °C	
	Storage	-40°C to +85 °C			
Relative Humidity Operating		10 to 90% RH (Non-Condensing)			
Ingress Protection Classification		IP54			

## Applications



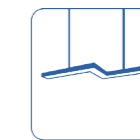
Retail Display Lighting



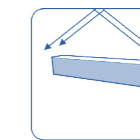
Refrigerated Display Lighting



LED Signage



Linear Accent Lighting



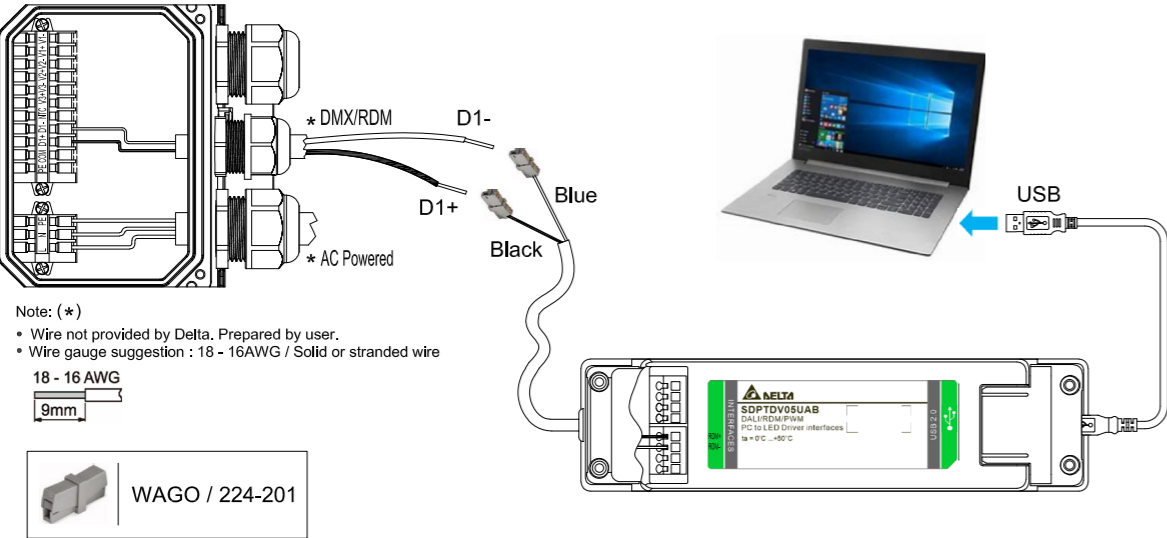
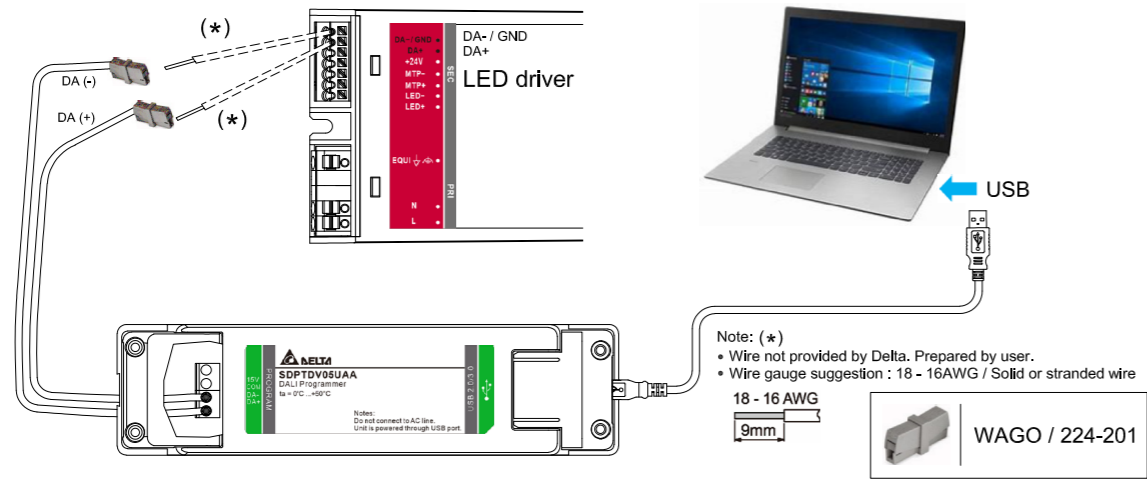
Indirect Lighting

# Programming Tools

## SDPTDV05UAx

SDPTDV05UAx is a multi-interface kit consist of DALI and DMX/RDM. This kit can be used as a controller for setting and querying standard DALI and DMX/RDM commands through GUI software. It can also be used as a programming tool similar to PTDV05UB. Simply connect to LED driver via DALI or DMX/RDM (not support in SDPTDV05UAA) for reading and writing various setting parameters.

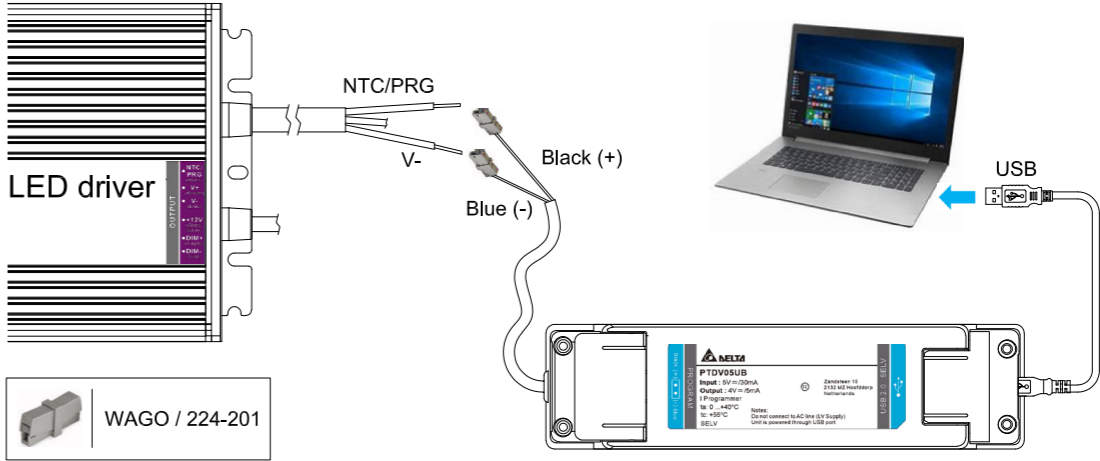
- Build-in DALI bus power supply for up to 50mA (around 25 DALI control gears)
- The DALI and DMX/RDM interfaces are polarity sensitive, and the LED driver must be powered from the external AC power supply during control and programming.



## PTDV05UB

PTDV05UB is a custom designed two wired programming tool used for reading and writing various setting parameters, this is one of GUI software supported interfaces called "iProgramming".

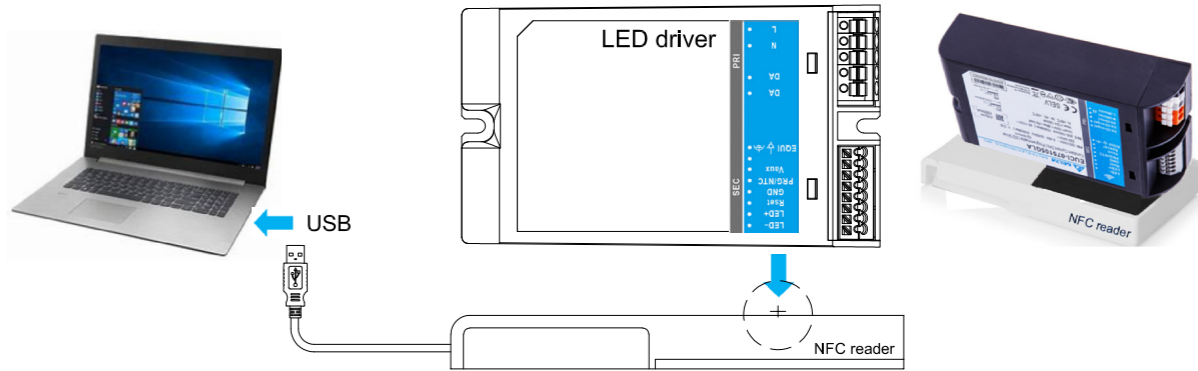
- Simple two wired touch and program
- No AC mains power on is needed for LED driver



## CPR30-USB & ISC.PRH101-USB

CPR30-USB and ISC.PRH101-USB are NFC reader/writer manufactured by FEIG Electronics. Both supported by GUI software for reading and writing various setting parameters.

- No wiring to LED driver is needed
- No AC mains power on is needed for LED driver

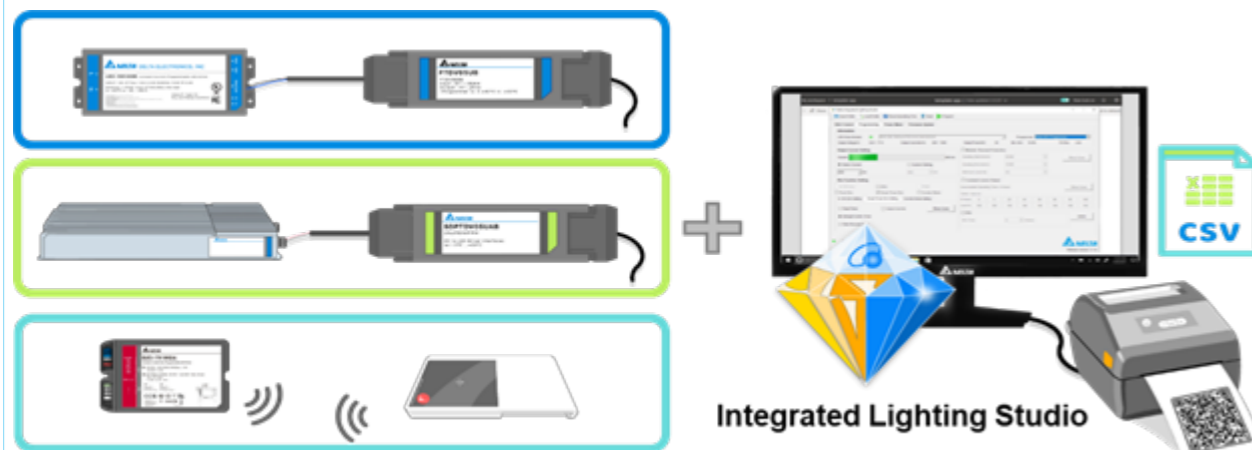


# Empower Your Lighting Solutions with Our LED Driver

## ILS

The Integrated Lighting Studio (ILS) consist of four major functions: DALI Control, Programming, Power Meter and Firmware Update. All functions are integrated in one single GUI to ease the design efforts for evaluating Delta LED drivers. The executable GUI and user manual can be downloaded from [www.deltaww.com/ILS](http://www.deltaww.com/ILS). The introduction video can be found in [https://youtu.be/AhyG\\_HoLWwE](https://youtu.be/AhyG_HoLWwE)

- DALI Control supports all DALI-2 command for Device Type of DT6 and DT8
- Programming supports output current setting, dimming mode setting and varied protection functions, the Zebra label printer is supported meanwhile csv file will be generated for data logging
- Power Meter is based on IEC 62386 part 252
- Firmware Update for DALI-2 models (support only EUCI LITE and EUCI PREMIUM)







[www.DeltaPSU.com](http://www.DeltaPSU.com) | [info@deltapsu.com](mailto:info@deltapsu.com)

Jan 2023 - All information and specifications are subjected to change without prior notice.

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2023 Spring