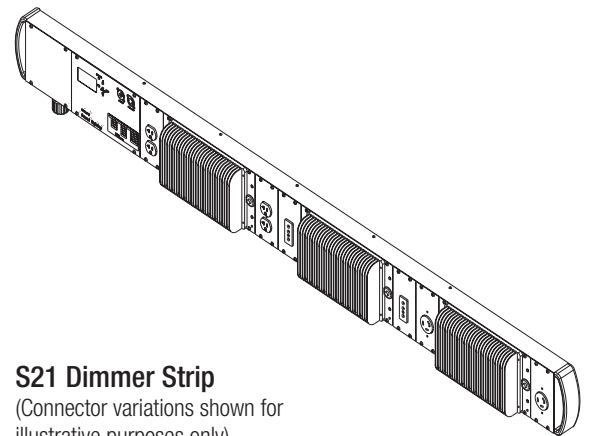


S21 Dimmer Strips

Strand Lighting is pleased to introduce the next generation of S21 Dimmer Strips; a perfect extension of our R21, C21, and A21 range of permanently installed dimmer systems. Systems can be mixed and matched as needed to create a completely flexible lighting system to meet the needs of any installation. Our dimmer strips feature quiet convection cooled IGBT dimming for low lamp noise and reliable operation.

IGBT dimmers are an Insulated Gate Bipolar Transistor power device that works in tandem with a dedicated microprocessor to control almost any type of lighting load required. IGBT dimmers are completely silicon-based and operate silently without the use of chokes, and do not produce any mechanical buzz or hum associated with Silicon Controlled Rectifier (SCR) dimmers. They are smaller, lighter, and generate fewer neutral harmonics than SCR dimmers.

Ideal for smaller systems, S21 Dimmer Strips may be used in schools, churches or any facility that does not have space for conventional dimmer racks. Easy to install and use, S21 Dimmer Strips can be fed from standard breaker panels.



S21 Dimmer Strip
(Connector variations shown for illustrative purposes only)

Features

- Fully Digital Dimmer strip with Forward and Reverse phase dimming (automatic or user-selectable)
- Compatible with new LED luminaires that require reverse phase operation
- DMX512 I/O
- Quiet convection cooled dual IGBT dimmers
- No dimmer room required and no added cooling needed
- Energy efficient – only a 2.5 volt insertion loss
- Dimmer strip features 6 dimmers packaged in three dual modules
- Solid-state dimming technology with adjustable transition (rise) time up to 1000 ms for quiet operation
- Low Harm™ mode to reduce neutral harmonics
- Automatic Overload and Short Circuit protection
- Choice of 3 power input locations - top, bottom and back
- Wide range of load connector options
- Local Focus buttons and LED status indicators
- Simple set up with back lit LCD display and easy button access. LCD blacks out when not in use
- Compact size for easy installation
- Integrates with Strand R21, C21, and A21 Dimmers
- Hangers available for wall and pipe mount applications
- Available in 120V (S21) or 230V (eS21) models
- ETL Listed (120V models) and CE Marked (230V models)



SPECIFICATION SUBMITTAL

CONSULTANT: <input type="text"/>	PROJECT NAME: <input type="text"/>	MODEL NUMBER QUANTITY: <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
DATE: <input type="text"/>	PROJECT NUMBER: <input type="text"/>	APPROVED BY: <input type="text"/>

S21 Dimmer Strip Components & Features

LCD Display and Menu System

The Processor's LCD Display and Menu System provides local control for accessing all system status information and for making configuration changes to the particular dimmer strip. User-defined operational selections and dimmer strip status includes:

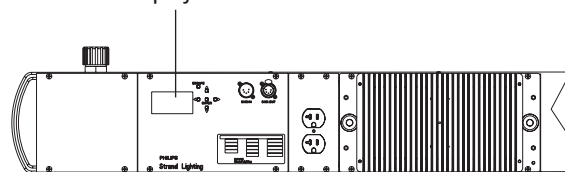
- Dimmer strip DMX512 addressing
- Dimmer strip and individual dimmer status reporting (including dimmer levels, connected loads, operational modes, error reporting, dimmer operating temperatures, voltages, and more)
- Dimming mode selections (per dimmer) for Forward Phase Control, Reverse Phase Control, dedicated line-voltage LED dimming, and non-dim
- Adjust dimmer transition times to optimize performance. Auto mode is available to insure the best performance under all conditions.
- Operational voltage selections (per dimmer) to prolong lamp life
- A selection of 13 different dimming curves - each dimmer can be set to its own dimming curve as desired
- Optional password protection to lock menu (to prevent unwanted changes)

Dual, IGBT Dimmer Modules

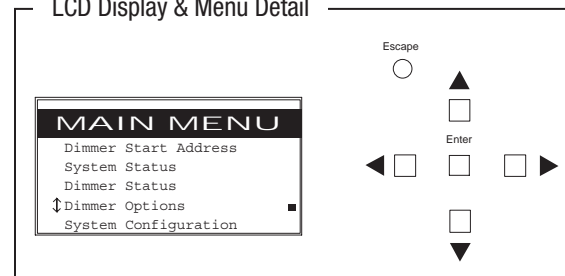
Each S21 Dimmer Module contains one dual 2.4kW IGBT dimmer with power (2.4kW) shared between the two dimmers within the module. Each dual dimmer module includes:

- Two Focus/LED Indicator buttons, that function as both focus adjustment control and visual status indicator for its dimmer
- No cooling fans, each dimmer module contains its own heatsink for convection cooling
- A selection of three load connector options - Edison (NEMA 5-20R), twistlock, or stagepin
- Can handle the following load types - incandescent, fluorescent (non-dim and Advance Mark 10 dimmable ballasts), inductive, line-voltage LED, magnetic and electronic low-voltage, neon, cold-cathode
- Dimmer modules contain no magnetic chokes and produce no mechanical noise, operating with an 1000ms transition time in either Reverse Phase Control (RPC) or Forward Phase Control (FPC) ensuring quiet lamp operation regardless of lamp type or size

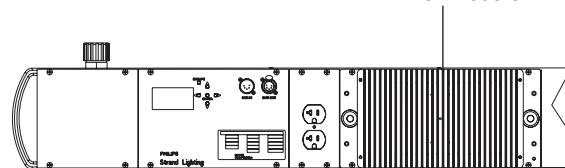
LCD Display & Menu



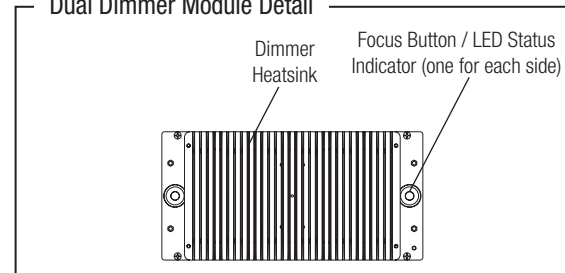
LCD Display & Menu Detail



Dual 2.4 kW IGBT Dimmer Module

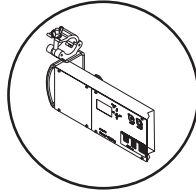
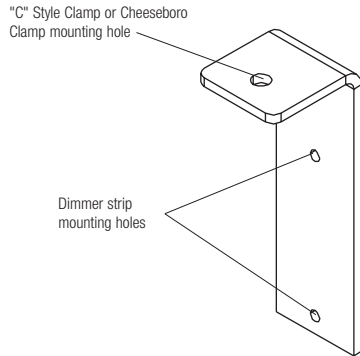


Dual Dimmer Module Detail



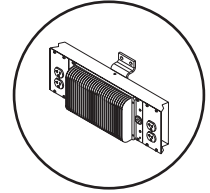
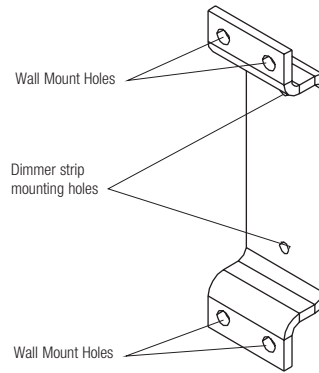
S21 Dimmer Strip Mounting Hardware

Pipe Mount Bracket (71725)



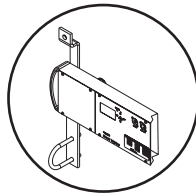
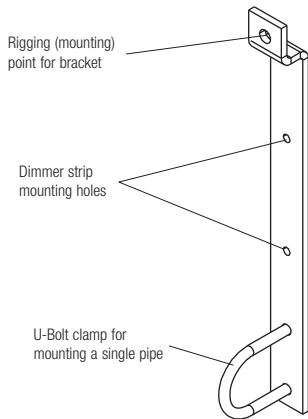
The 71725 Pipe Mount Bracket is designed to mount to a S21 Dimmer Strip and to allow installation of "C" Style Mounting Clamps (SC) or 71351 Cheeseboro Clamps (each sold separately) for truss or pipe hanging applications. Note, two Pipe Mount Brackets are required to mount an S21 Dimmer Strip.

Wall Mount Bracket (71727)



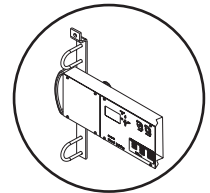
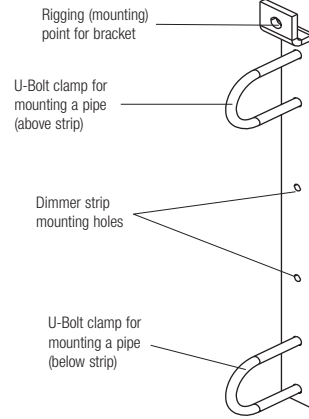
The 71727 Wall Mount Bracket is used to permanently mount the S21 Dimmer Strip to a wall. Note, two wall Mount Brackets are required to mount a S21 Dimmer Strip.

Single Pipe Mount Hanging Bracket (71730)



The 71730 Single Pipe Mount Hanging Bracket is designed to mount to a S21 Dimmer Strip and to allow a single 1-1/2" (Schedule 40) pipe to be hung underneath. Note, At least two Pipe Mount Brackets are required to mount a S21 Dimmer Strip (or as required by code).

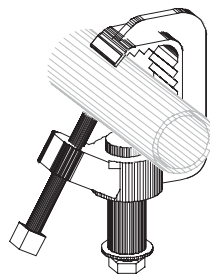
Double Pipe Mount Hanging Bracket (71731)



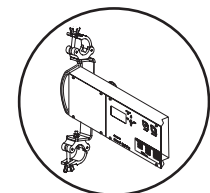
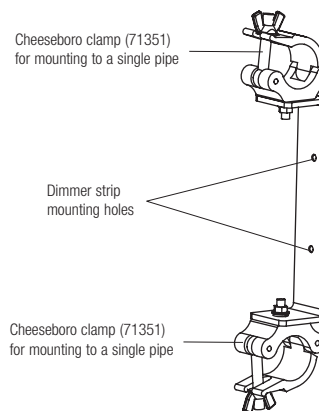
The 71731 Double Pipe Mount Hanging Bracket is designed to mount to a S21 Dimmer Strip and to allow two 1-1/2" (Schedule 40) pipes to be hung underneath and over the raceway. Note, At least two Pipe Mount Brackets are required to mount a S21 Dimmer Strip (or as required by code).

"C" Style Clamp (SC)

The SC "C" Style Mounting Clamp is used to mount S21 Dimmer Strips beneath a 1 1/2" schedule 40 pipe or a 2" aluminum tube (truss). Each "C" Style Clamp installs on a 71725 Pipe Mount bracket (sold separately) and allows S21 Dimmer Strips to be quickly relocated. Note, two "C" Style Clamps are required to mount an S21 Dimmer Strip.



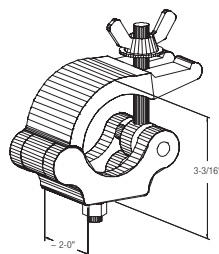
Dual Clamp Mount Hanging Bracket (71510)



The 71510 Dual Clamp Mount Hanging Bracket is supplied with two 71351 clamps and is designed to mount to a S21 Dimmer Strip and to allow a single 1-1/2" (Schedule 40) pipe to be hung underneath. Note, At least two Dual Clamp Mount Brackets are required to mount a S21 Dimmer Strip (or as required by code).

Cheeseboro Style Clamp (71351)

The 71351 Cheeseboro Style Mounting Clamp is used to mount an S21 Dimmer Strip above either a 1 1/2" schedule 40 pipe or a 2" aluminum tube (truss). Each Cheeseboro Clamp installs on a 71725 Pipe Mount bracket (sold separately) and allows S21 Dimmer Strips to be quickly relocated. Note, two Cheeseboro Style Mounting Clamps are required for each S21 Dimmer Strip.



Ordering Information

Cat No. Description

S21 Dimmer Strips, 120 Volt		Input Power Cables	
71500	3, Dual 2.4kW (max.) Dimmer Modules, 1000 ms transition time, S21 Dimmer Strip with GP (Grounded Stage Pin) connectors	71432	6 ft AWG #10/5 power input cable with L21-20P GTL plug for field installation
71501	3, Dual 2.4kW (max.) Dimmer Modules, 1000 ms transition time, S21 Dimmer Strip with GTL (Twistlock) connectors	71436	6 ft AWG #10/5 power extension cable with L21-20P GTL plugs
71502	3, Dual 2.4kW (max.) Dimmer Modules, 1000 ms transition time, S21 Dimmer Strip with GR (Edison, NEMA 5-20R) connectors	71437	8 ft AWG #10/5 power extension cable with L21-20P GTL plugs
		71438	12 ft AWG #10/5 power extension cable with L21-20P GTL plugs
Notes:		Clamps / Mounting / Hangers / DMX Termination	
(1)	Each S21 IGBT dual module contains two dimmers and is fully rated at 2.4kW per module. The 2.4kW rating of the module may be split evenly across both dimmers at 1.2kW, used on a single dimmer at 2.4kW, or any combination of loads on either dimmer that does not exceed 2.4kw per module.	SC	Pipe Clamp
(2)	S21 Dimmer Strips do not include optional input power cables which are available for field installation.	71351	Cheeseboro Clamp
S21 Dimmer Strip Accessories		71725	Pipe Mount Bracket (for use with Cheeseboro or Pipe Clamps)
Spare Modules		71510	Dual Clamp Mount Hanging Bracket (for use with Cheeseboro or Pipe Clamps)
71700	Spare 120V Dimmer Module	71727	Wall Mount Bracket
71701	Spare Processor / LCD Display Unit	71730	Single Pipe Mount Hanging Bracket
		71731	Double Pipe Mount Hanging Bracket
		71346	DMX512 Terminator

Technical Information

Number of Dimmers:	3 Dual Dimmer Modules	Humidity:	5%-95% Non condensing
Output Voltage:	100 / 110 / 115 / 120 VAC (user selectable)	Cooling:	Natural Convection
Minimum Load:	1 watt	Height:	6.0 in. (152.4 mm)
Maximum Load / Dimmer:	2.4kW per Dimmer Module (max.)	Depth:	4.0 in. (101.6 mm)
Dimming Phase:	Forward or Reverse (user selectable or automatic)	Length:	72.0 in. (1,828.8 mm)
Transition (Rise) Time:	Up to 1000 ms (automatic adjustable)	Weight:	38.5 lbs (17.5 kg)
Insert Loss:	Max 2.5 volts	Load Connector Types:	GP – Grounded Stage Pin GTL – Twistlock GR – Edison NEMA 5-20R
Power Feed:	3-phase 4 wire 120/208 volts 20 amps; Terminal block or optional input power cables available		
Frequency:	50/60Hz		
Ambient Temperature:	0 to 40 degrees C		



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