

TRINITY12 DMX™

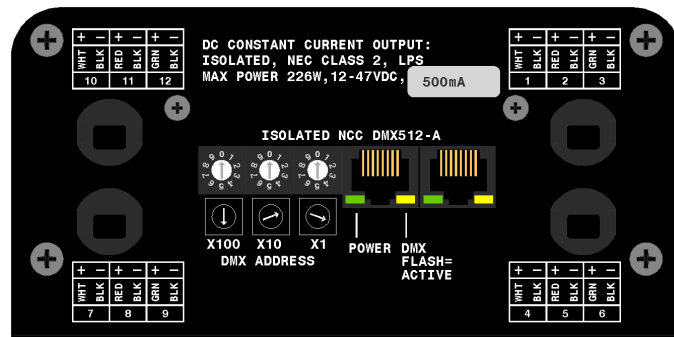
The Trinity 12 DMX LED Driver/Dimmer™ is the first fully digitally controlled power source for Solid State Lighting applications providing the ultimate in energy efficiency performance and configuration flexibility capable of driving and dimming up to 144 high power LEDs.

SIMPLE, EFFICIENT, VERSATILE

- Drive up to 12 LEDs per channel
- Up to 12 configurable output channels
- Ideal for 300mA to 700mA high power LED applications
- Best-in-Class, Smooth 0.2% to 100% dimming technology (patent pending)
- SELV, NEC Class 2 outputs
- Up to 226 watts of output power
- 87% efficiency
- USITT DMX512A compatible
- CE and UL Approval
- Convection Cooled
- CB Scheme



USITT DMX512A interface with RJ45 loop thru connections and rotary dial addressing function



LISTED
LED DRIVER
44DE

APPLICATIONS

This 3 in 1 Driver/Dimmer solution is ideal for Solid State Lighting applications in.....

- General Illumination
- Architectural
- Entertainment
- Retail
- Hospitality

TRINITY 12 DMX Model Options

Model #	# of Channels	Drive Current	Maximum # of LEDs per Channel	Maximum # of LEDs
70-12-0300-DMX-3	12	300 mA	12	144
70-12-0350-DMX-3	12	350 mA	12	144
70- 9- 0400-DMX-3	9	400 mA	12	108
70- 9- 0500-DMX-3	9	500 mA	12	108
70- 6- 0600-DMX-3	6	600 mA	12	72
70- 6- 0700-DMX-3	6	700 mA	12	72

Input Specifications

Rated Input Voltage And Frequency	115 to 277 Vac 47-63 Hz		
Rated Input Current	2.7 A @ 115 Vac 1.1 A @ 240 Vac 1.0 A @ 277 Vac		
Power Factor EN61000-3-2	@ 115 or 277 Vac, 100% load	0.97	W/VA min
Input Current Total Harmonic Distortion	@ 115 or 277 Vac 100% load	13	% max

Environmental Specifications

Location Rating	Dry
Operating Ambient Temperature	-20 °C to +40 °C
Cold Start Temperature	-20 °C
Storage Ambient Temperature	-40 °C to 80 °C
Relative Humidity	5% to 95% noncondensing
MTBF (MIL HDBK-217F) (12 channel)	>60,000 hours @ 40 °C >97,000 hours @ 25 °C

DMX Interface Specifications

Control Method	DMX512-A
DMX Receiver Isolation	Isolated from earth ground
Start Codes	Will only respond to NULL START code
Loss of DMX Input Signal	Outputs will go to 100% light intensity in less than 1 second

Output Specifications

Rated Output Power	@ 40 °C ambient	226	W max
Output Voltage Dynamic Range	Under load conditions	12 to 47	Vdc
Efficiency	100% load @ 277 Vac input	87	%
Turn on delay	Time required for stabilization of all outputs	2	sec typical
Output Current Tolerance		+/-5 % of nominal	

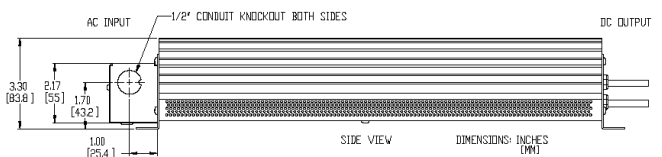
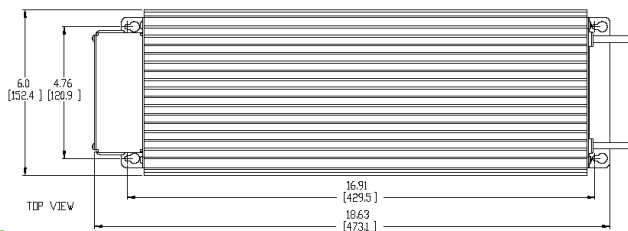
Protection

Output Protection	Over voltage, over current, short circuit protection
Over Temperature Protection	Outputs will shut down when external ambient temperature exceeds 43 °C or when case temperature reaches 85 °C nominal.
Output Interconnection Protection	Hiccup mode with automatic recovery upon removal of short

Safety and EMI/EMC Specifications

Agency Approvals	UL60950-1, IEC 60950-1 SELV, NEC Class 2 outputs, LPS Standard UL8750
Conducted & Radiated Emissions	EN55022, ICES-003 FCC Title 47, Part 15 Class A EN55015 Conducted (external filter required)
EMC	EN 61547 - general lighting

Mechanical Specifications



Dimensions in Inches [mm]