

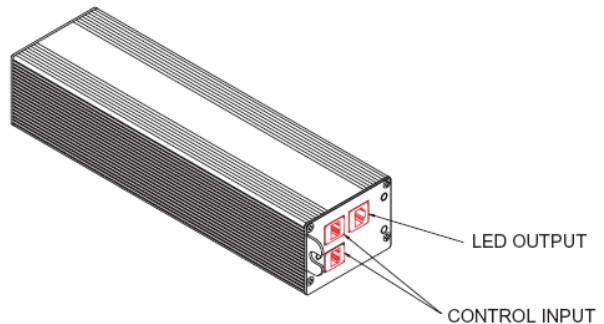
## Exclara Product Brief

### EXM014

#### 120 Watt Dimmable LED Ballast

#### General Description

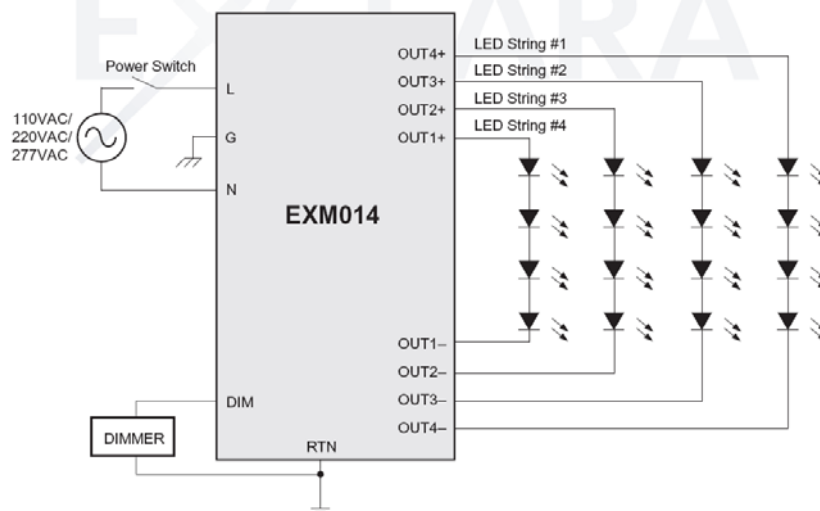
The EXM014 is a highly integrated, easy to use LED driver. It has an output capacity of 120W that is distributed to a maximum of four channels to power LED strings. For applications that require dimming of the output the EXM014 accepts a standard 10V fluorescent style dimmer.



**EXM014**

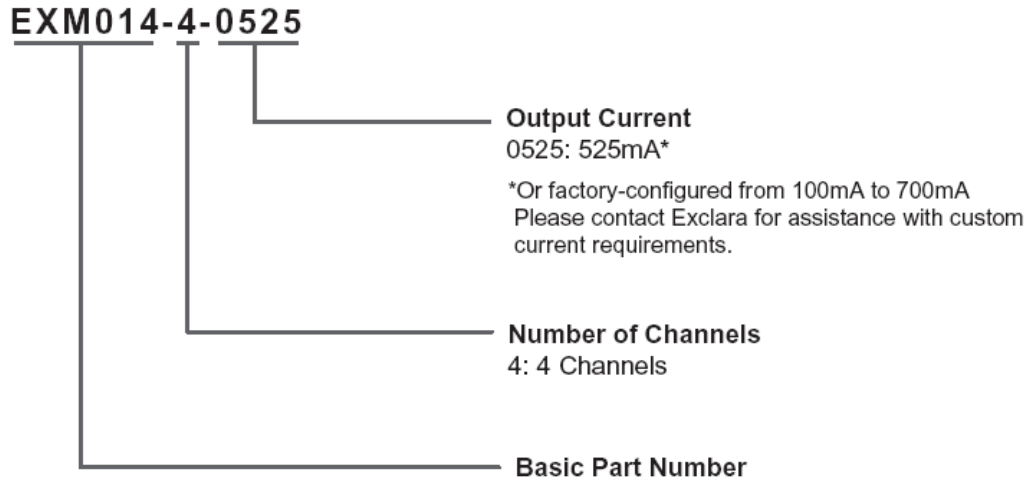
Features	Applications
<ul style="list-style-type: none"> <li>• Up to 120W total output power</li> <li>• Full range input: 120VAC/240VAC/277VAC</li> <li>• Integrated power factor correction</li> <li>• High efficiency: &gt; 85% at full load</li> <li>• UL listed product for lighting applications</li> <li>• Compatible with Lutron Nova T 0V to 10V dimmer, type NTFTV (or equivalent)</li> <li>• Protected against short-circuit and open-circuit conditions</li> </ul>	<ul style="list-style-type: none"> <li>• Commercial lighting</li> <li>• Industrial lighting</li> <li>• Indoor and outdoor lighting</li> </ul>

#### Application Diagram



**Figure 1. EXM014 Application**

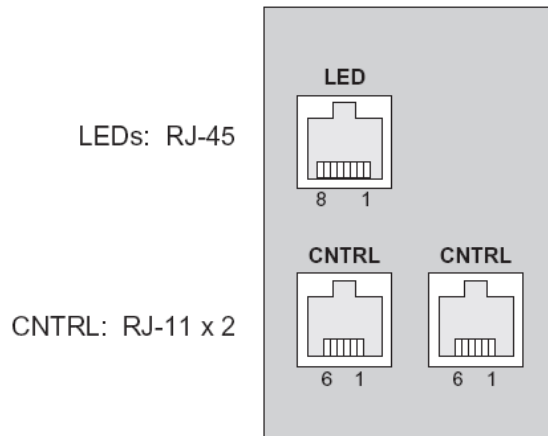
## Ordering Information



### Example:

EXM014-4-0525: 4-Channel Output with current set at 525mA

## Module Connections



## AC Input Cable (18AWG)

Name	Color	Description
L	Black	Line voltage input
N	White	Neutral input
G	Green	Chassis Ground connection



## Absolute Maximum Ratings

Exceeding the Absolute Maximum Ratings will damage the device.

Parameter	Rating
Input Voltage (rms)	340V for 0.5 sec
Output Current per Channel	Internally Limited

## Electrical Characteristics

Specifications with minimum and maximum values apply over the ambient temperature range of -20°C to 55°C.

Typical values are representative of performance at an ambient temperature of 25°C.

Symbol	Parameter	Conditions	Min.	Typ.	Max.	Units
$V_{IN}$	Input Voltage (rms)		90		305	V
freq <sub>IN</sub>	Input Frequency		47		63	Hz
$V_{UVLO}$	Under-voltage Lockout	At Full Load $V_{IN}$ rising $V_{IN}$ falling	85		90	VAC
PF	Power Factor	$V_{IN} = 120VAC$ or 240VAC Full rated load on each output	0.9	0.95		W / VA
$I_{IN}$	Input Current	$V_{IN} = 90VAC$ to 264VAC Full rated load on each output			2	A
	Inrush Current	$V_{IN} = 120VAC$			6	A
$P_{OUT}$	Total Power Output <sup>(2)</sup>				120	W
h	Efficiency	$I_{LED} =$ rated maximum; $V_{IN} = 120VAC$		86		%
$I_o$	Output Current <sup>(1)</sup>	4 channel option		525		mA
	Turn-on Delay	AC input to LED output delay		1		Seconds

### Notes:

1. Specifications refer to each channel unless state otherwise.
2. Total output power dependant on properly designed thermal management.



## Environmental

Parameter	Value
Operating Temperature	-20°C to 55°C (measured at T <sub>c</sub> )
Storage Temperature	-40°C to 85°C
Case Temperature (Max) T <sub>c</sub>	85°C (Location of T <sub>c</sub> is specified in the mechanical drawing)
MTBF	to be determined
Humidity	5% to 95% non-condensing
Weight (kg)	1.9

## Electromagnetic Compatibility

Parameter	Value
EMI Conducted and Radiated	EN55015, Class B, FCC Title 47CFR Part 15 Class B
Conducted Immunity	IEC/EN61000-4-6
Surge Immunity	IEC/EN61000-4-5, Level 4
EMC Compliance – Fast transients/Bursts	IEC/EN61000-4-4, Level 2
ESD Immunity	IEC/EN61000-4-2, Level 4
Radiated RFI	IEC/EN61000-4-3, 26MHz-1GHz, 10V/M, 80% AM
Voltage Dip	IEC/EN61000-4-11
Harmonics	IEC/EN61000-3-2, Class A & Class C
Voltage Fluctuations/Flicker	IEC/EN61000-3-3

## Safety

Parameter	Value
Safety	UL/EN60950-1 LPS Classification Luminarie FKSZ/7 listing for damp and dry locations