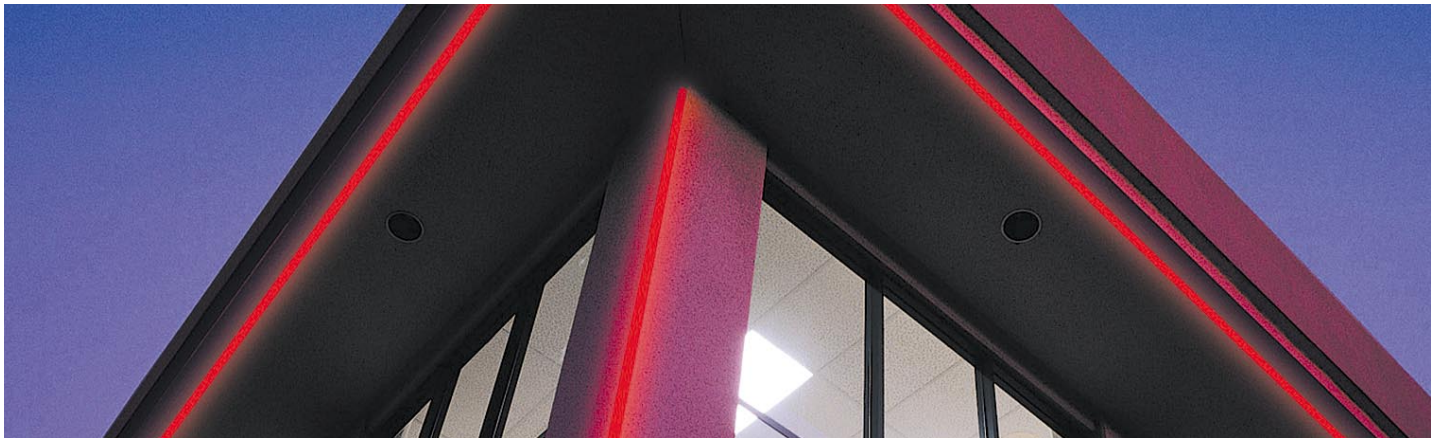
ADVANCE

i-Xitanium™
LED Electronic Driver

350mA and 700mA Constant Current Output



These drivers are included in the i-Xitanium (illumination) segment of the Xitanium family of products.

The 350mA and 700mA i-Xitanium Constant Current Output drivers provide the constant DC current output required to enhance the long life and optimum operation of high brightness LEDs.

Xitanium™ Drivers have an operating life matching that of the LEDs.

Features	Benefits
Slim housing, small Size (132x30x22 mm)	Provides freedom (flexibility) to designers; Support spatial unobtrusiveness of LEDs.
Meet approbation requirements (UL, CSA, FCC)	It is a hazard free product; It can be installed in practically any location.
DC constant current output	It can operate any LED lamp design the customer is developing or already marketing. No binning of LEDs results in cost savings.
Reliability	Drivers last as long as LEDs (≥ 50,000 hrs). 5 years warranty (similar to ballasts).
Power Efficiency	Optimization of the usage of the total system power; Customer pays for the power required and no more (optimized cost of ownership—COO); Power losses (up to 40% of total power) saved by this operation mode.
Compliant with Luxeon™ Power Light Sources	

Selection Guide

Part Number	Description
LED120A0700C24F	120V/17W/0.7A Xitanium LED Driver
LED120A0350C33F	120V/12W/0.35A Xitanium LED Driver

Note:
1. Drivers work with all colors of standard and custom Luxeon™ Power Light Sources.

Electrical Characteristics

Input

Parameter	Symbol	LED120A0700C24F	LED120A0350C33F	Units
Input Voltage Range	V_{in}	108 – 132	108 – 132	V
Frequency	f	60	60	Hz
Power Consumption Range	P_{in}	6.8 – 21.5	1.1 – 15.0	W
Efficiency	–	80% typical	80% typical	%

Output

Parameter	Symbol	LED120A0700C24F	LED120A0350C33F	Units
Power Output Range	P_o	5.5 – 17.2	0.9 – 12.0	W
Output Current	I_o	700 (±35)	350 (±17)	mA
Total Harmonic Distortion	THD	20 Maximum	20 Maximum	%
Power Factor	P_f	0.9 Minimum	0.9 Minimum	–
Crest Factor LED Current	I_{pk}/I_{avg}	1.5 Maximum	1.5 Maximum	–
Output Voltage Range	V_o	7.8 – 24.6	2.6 – 32.8	V

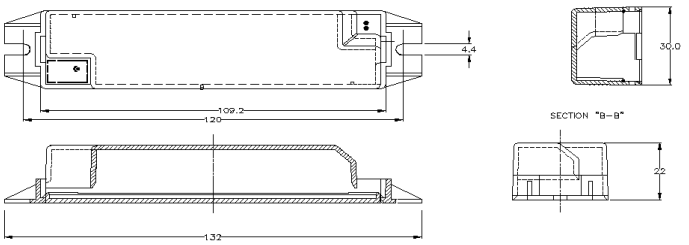
Notes:
1. Electrical characteristics at 25°C ambient temperature.
2. Output insulation 3.25KV 60 Hz.
3. FCC Class B.

Environmental Ratings

Parameter	Symbol	Minimum	Maximum	Units
Operating Ambient Temperature	T_{op}	-40/-40	+60/+140	°C/°F
Storage Ambient Temperature	T_{st}	-40/-40	+80/+176	°C/°F
Case Temperature	T_c	–	+90/+194	°C/°F
Relative Humidity	RH	–	80	%
Lifetime (failures after 50,000 hours)	L_{50K}	–	5	%

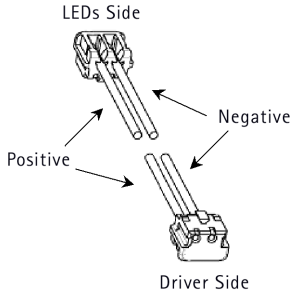
Notes:
1. Case temperature should be measured at test point Tc, as marked on driver label.

Mechanical Dimensions

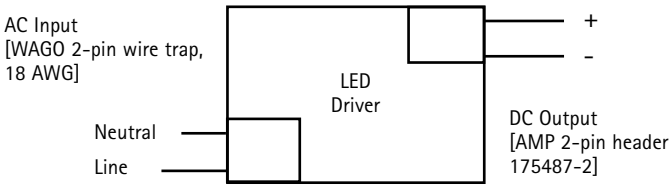


Notes:
1. All dimensions are in millimeters.
2. Drawing not to scale.
3. Feature two slots for mounting with M4 or #6 size screws.
4. AC input WAGO 2-pin wire trap, 18AWG. Leads must be solid core or tinned if multi-stranded wire is used.
5. DC output AMP 2-pin header type 175487-2. Use AMP DC/DC connection cable 1496-992-1.
6. Housing material Noryl HS2000, UL 94-V0 flame retardant, color black.
7. Driver weight, 60 grams.

DC/DC Connection Cable

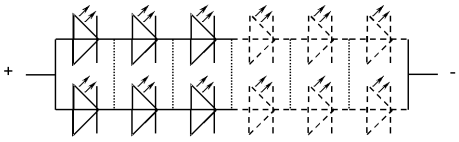


Driver Wiring Diagram

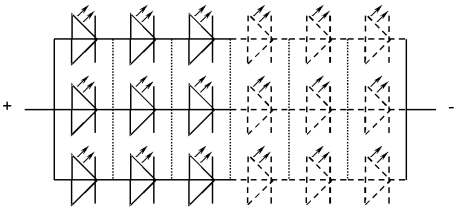


Configuration arrays when using Luxeon™ LEDs

With the 700mA Output Current Xitanium:

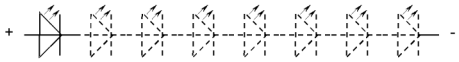


To drive at 350mA/LED: from 3 to 6 LEDs in series; 2 LEDs in parallel. With or without crossovers.



To drive at 233mA/LED: from 3 to 6 LEDs in series; 3 LEDs in parallel. With or without crossovers.

With the 350mA Output Current Xitanium:



To drive at 350mA/LED: from 1 to 8 LEDs in series

Part Number Description

LED xxx x xxxx x xx x

LED	LED Driver
xxx	Input Voltage (024, 120, 230)
x	AC or DC Input (A=AC; D=DC)
xxxx	Output Voltage in Volts or Output Current in mA
x	Output Mode (C=constant current; V=constant voltage)
xx	Output Current in tenths of Amps (1/10) or Max Open Circuit Voltage in Volts
x	Output Type (F=Fixed; D=Dimmable; C=use with DC/DC Controller only)

Example: LED 120 A 0012 V 21 F

LED	LED Driver
120	Input Voltage
A	AC Input
0012	Output (in Volts)
V	Constant Voltage
21	Output Current in tenths of Amps (i.e. 2.1 Amps)
F	Fixed Output