



## SPEC SHEET: WAVELUX INDOOR/OUTDOOR ZIGBEE RGBW DRIVER 120W

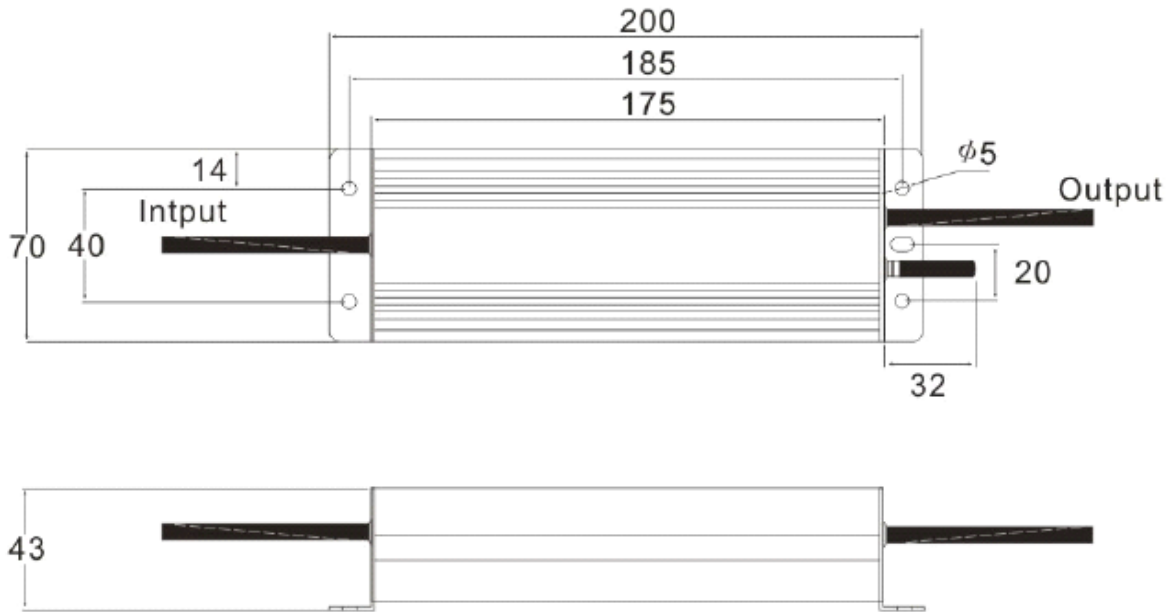
The Wavelux Outdoor Zigbee RGBW LED Driver is a wonderfully crafted LED dimmable power supply, providing a constant voltage output, with a high efficiency (up to 90%). With built-in safety features like short circuit protection, overload, no-load, and over temperature control, the IP66 design is suitable for both indoor and outdoor locations. The fan-less design means a quiet operation, and the Zigbee wireless RGBW controls allows control through multiple apps like Google Home, Amazon Echo, Philips Hue, etc. Minimum dimmability is 1%. Works with all 24V Pixel-Free LED and Wavelux LED Products, among other LED Strip lights. The high frequency (8KHz PWM) output allows for flicker-free dimming control, suitable for stage and theatrical, commercial, video, residential, and the 100-277V AC input allows for worldwide installation.

Model		KVZ-12120-xC-A	KVZ-24120-xC-A
<b>X=1, 2, 3, 4, 5 for DIM (DW); CCT(TW); RGB; RGBW; RGBW+CCT (RGCW)</b>			
<b>Output</b>	DC Voltage	12V	24V
	Voltage Tolerance	±0.5V	
	Voltage Regulation	±0.5%	
	Rated current	CH1+CH2+CH3+CH4+CH5=10A	CH1+CH2+CH3+CH4+CH5=5A
	Rated power	120W	
	Load Regulation	±2%	
<b>Input</b>	Voltage Range	100-277VAC	
	Frequency Range	47 - 63Hz	
	Power Factor (Typ.) @ full load	PF≥0.98/ 230VAC (Full loading)	
	THD (Typ.) @ full load	<15%	
	Efficiency (Typ.) @ full load	89% @230VAC	89%@230VAC
	AC Current (Max.)	1.3A	1.25A
	Inrush Current (Typ.)	53A (Twidth 250us measured at 50% I peak, COLD START, 230VAC)	
	Leakage current	<0.5mA	
<b>Protection</b>	Short Circuit	Hiccup mode, recover automatically after fault condition is removed	
	Over Load	≤120% ,hiccup mode, recover automatically after fault condition is removed	
	Over temperature	≤100℃±10℃, shutdown output voltage, recover automatically after temperature drop	
	Protection Class	II	
<b>Environment</b>	Working TEMP.	-40~+60℃ (see below derating curve)	
	Working Humidity	20 - 95%RH ,non-condensing	
	Storage TEM.,Humidity	-40 - +80℃, 10 - 95%RH	
	TEMP.coefficient	±0.03%/℃ (0 - 50℃)	
	Vibration	10~500Hz, 5G 10min./1 cycle,period for 60min. each along X,Y,Z axes	
<b>Safety &amp; EMC</b>	Safety standards	EN61347-1 EN61347-2-13 (EU) & UL8750 UL1310 (US)	
	Withstand voltage	I/P-O/P:3.75KVAC I/P-FG:1.88KVAC O/P-FG:0.5KVAC (EU) & I/P-O/P:1.5KVAC(US)	
	Isolation resistance	I/P-O/P: 100MΩ/500VDC/25℃/70%RH	
	EMC Emission	EN55015 EN61000-3-2 EN61000-3-3 (EU) & FCC Part 15 B (US)	
	EMC Immunity	EN61000-4-2,3,4,5,6,11 EN61547	

COMPANY	PROJECT	AREA	APPROVED BY	DATE



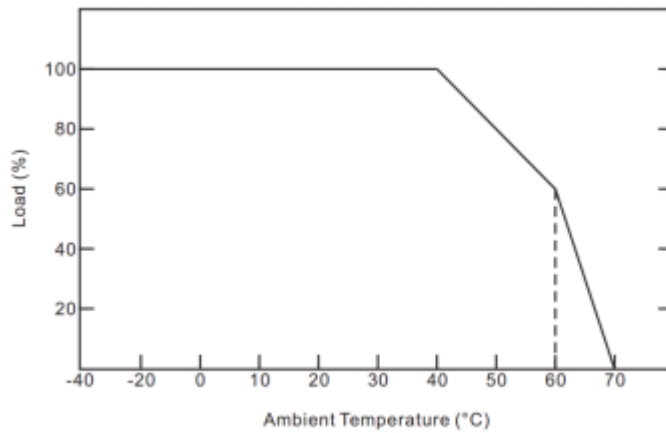
**STRUCTURAL DIAGRAM:**



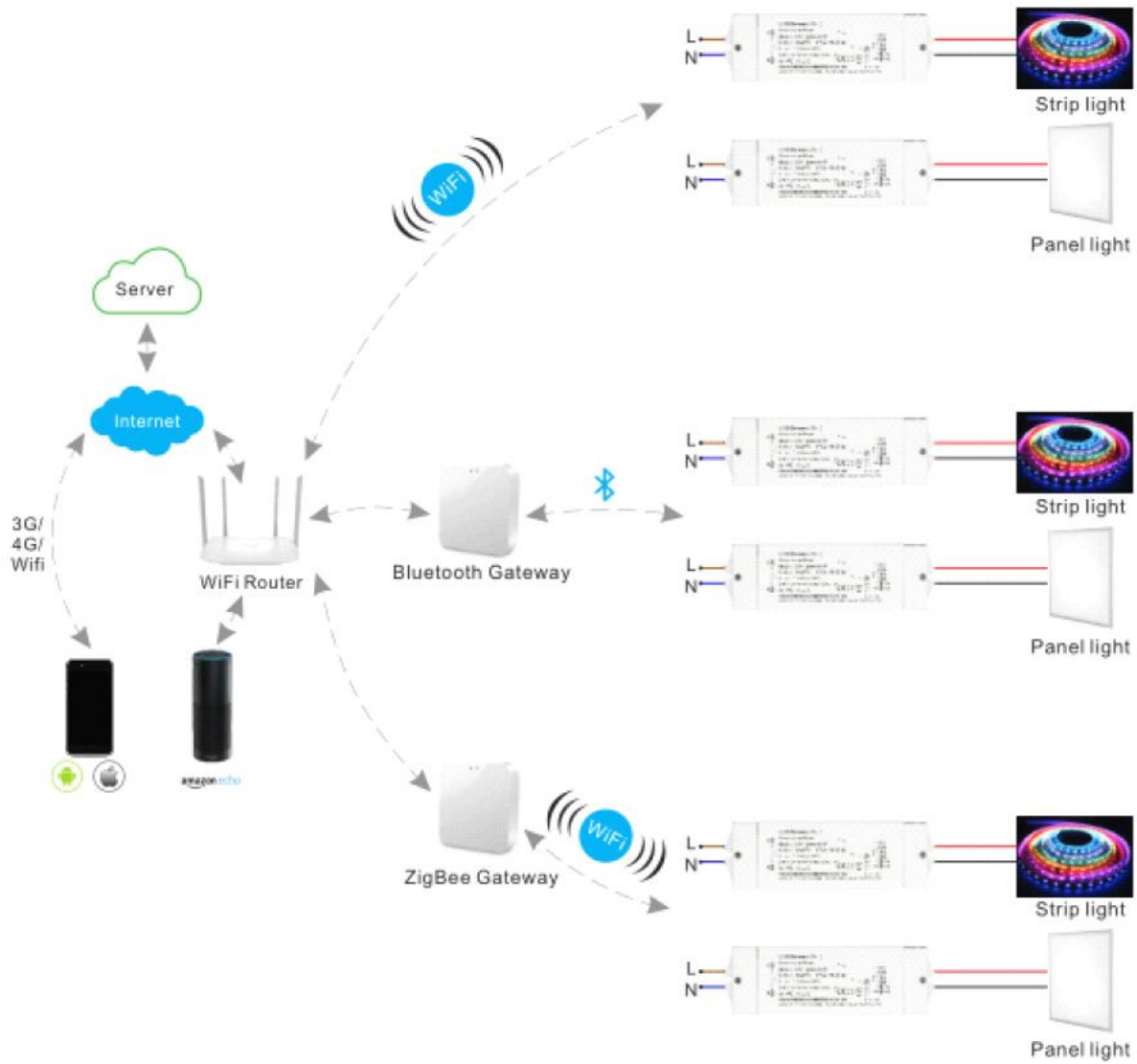
**WIRING DIAGRAM**



**DERATING CURVE**



### ZIGBEE OPERATION



Use smartphone or tablet to scan the QR code or download "Smart Life" from the Apple Store or Android Marketplace.



## ZIGBEE DRIVER CONTROLLED BY SMART SPEAKER

### Google Home

1. Configure Google Home app through "Google Home" in App Store or Google Play to install the app
2. Set up Google Home and configure in Home Control
3. Add devices in Smart Life app (Refer to App instruction)
4. Link Smart Life account in Home Control, then Wavelux Zigbee dimmable driver could be controlled through Google Home.

For detailed operation, please refer to **Quick Guide of Using Google Home to Control Smart Devices**

### Amazon Echo

1. Configure Echo through web or Amazon Alexa App in App Store or Google Play to install the app.
2. Set up Amazon Echo and enable Smart Life Skill
3. Add devices in Smart Life app (Refer to App Instruction)
4. Link Smart Life account to Alexa
5. Discover devices which have already been added in the Smart Life app, then Wavelux Zigbee dimmable driver can be controlled through Echo.

For detailed operation, please refer to **Quick Guide of Using Amazon Echo to Control Smart Devices**

### **DIM (DW) Dimming:** Rubber Cable

Black is output (V+) Positive, White is output (V-) negative

### **CCT (TW) Dimming:** 1015 Electronic Cable, (V+) 16AWG; (V-) 18AWG

Black is output (V+) Positive, White (CW-) and Yellow (WW-) are output (V-) Negative

### **RGB Dimming:** 1015 Electronic Cable, (V+) 16AWG; (V-) 18AWG

Black is output (V+) Positive, Red (R-), Green (G-) and Blue (B-) output (V-) Negative

### **RGBW Dimming:** 1015 Electronic Cable, (V+) 16AWG; (V-) 18AWG

Black is output (V+) Positive, Red (R-), Green (G-), Blue (B-) and White (W-) output (V-) Negative

### **RGBW+CCT Dimming:** 1015 Electronic Cable, (V+) 16AWG; (V-) 18AWG

Black is output (V+) Positive, Red (R-), Green (G-), Blue (B-), White (W-) and Yellow (WW-) output (V-) Negative

## FAQ

What is Zigbee?

Zigbee is a wireless protocol that uses a gateway like an Amazon Echo Plus, which can be controlled via voice or smartphones or tablets. The Wavelux Zigbee driver has the built-in wireless networking to allow for total dimming control without adding additional hardware to the system. It works with most 24V LED Strips seamlessly.

Is this capable of being used both indoor and outdoors?

Yes, the rating is IP66 and rated for both indoor and outdoor applications. Be sure to use proper ventilation when using to avoid the power supply overheating.

## PRECAUTIONS

- In order to guarantee sufficient voltage is available to drive LED Strip in all conditions, make sure power supply is rated for 20% more than LED Strip consumption.
- Do not touch AC Power Supply when powered on
- Polarity Matters! Make sure to wire positive and negative poles of wires during installation to avoid damage to the strip.
- Make sure driver is installed with adequate ventilation around it to allow for heat dissipation.
- Product is not intended to be submerged and used in swimming pools or hot tubs
- Professional installation recommended