



www.mawalighting.com



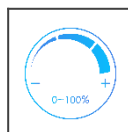
HLD503

Dimming and Color Driver

Max 44W constant current output



ZigBee 3.0
Mesh Network



Dimming Control



ON/OFF





Features

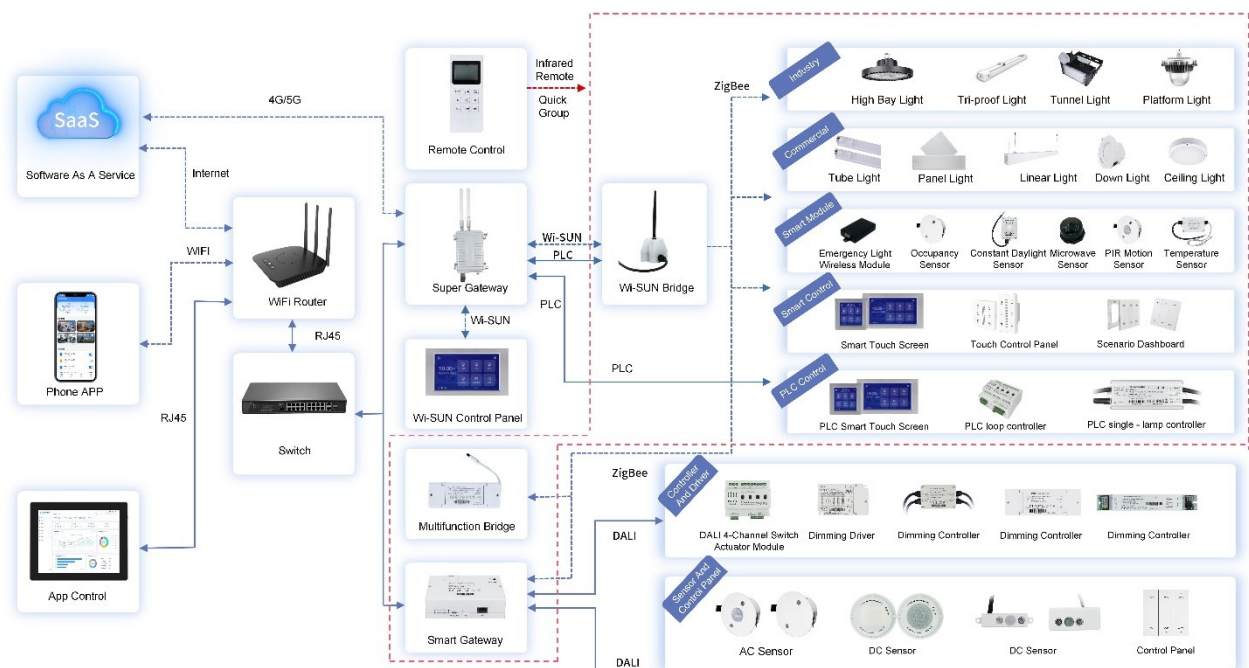
- Max 44W constant current output
- Input 200-240Vac
- Isolated Driver
- Support power meter/no power meter 2 versions
- High efficiency 85%
- Standby Power < 0.5W
- Support ZigBee 3.0 standard protocol
- Control Range 30m
- Operating Temperature -20°C to 55 °C

Product Description

The HLD503-Z is a dimming power supply with the ZigBee 3.0 standard protocol built in. The device includes a reserved infrared remote-control interface, which, when used with our “Magic Wand Smart Remote Controller,” enables quick device group addition, parameter configuration, and other operations, simplifying the deployment process.

When integrated with our lighting control system, it supports multiple control methods — remote control via mobile APP, as well as local operation through dimming panels and remote switches. It is also compatible with ambient light sensors and motion sensors, enabling intelligent dimming control based on ambient brightness and human movement, ensuring both convenience and energy efficiency.

System Diagram





Product Data

Efficiency	85% MAX
Warranty	5 Years
Certificate	CE

Application Conditions

Operating Temperature	-20°C ~ 55°C
-----------------------	--------------

Mechanical and Housing

Structure Material	PC V0
Fixture Color	White

Hardware Interface

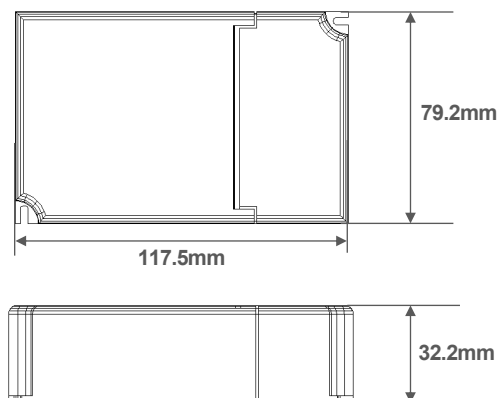
Terminal		Description
AC In	L	AC input L
	N	AC input N
LED Out	LED+	DC Output LED+
	LED-	DC Output LED- /DC Output Cool LED-
	W-	DC Output Warm LED-

Operating and Electrical

Input Voltage	200-240Vac
Output Current	1050mA MAX±5%
Output Voltage	24-42VDC (46VDC MAX at No Load)
Max Output Power	44W
PF	0.9 (MAX Load)
Control Range	30m
Frequency	2.4GHz
Standby power	< 0.5W

Drawing

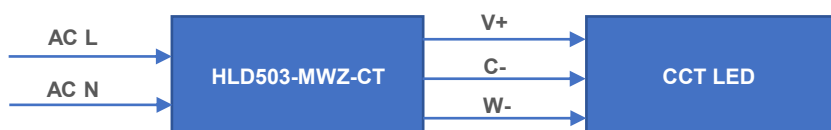
Unit : mm



Hardware Connection Diagram



HLD503-MWZ-SC-IA-EU-OTA-3.0



HLD503-MWZ-CT-IA-EU-OTA-3.0



Product Parameter

Model Number	Input voltage	Output Voltage	Output Current	Max Output Power	PF	Control Range	Frequency	Channel(s)
HLD503-MWZ-SC-BS-1C-IA-EU-42V-OTA-3.0	200-240Vac	24-42 VDC (46VDC MAX at No Load)	1050mA MAX±5%	44W(MAX)	> 0.95 (MAX Load)	30m	2.4G	1
HLD503-MWZ-CT-BS-2C-IA-EU-42V-OTA-3.0								2
HLD503-MWZ-SC-BS-PM-1C-IA-EU-42V-OTA-3.0								1
HLD503-MWZ-CT-BS-PM-2C-IA-EU-42V-OTA-3.0								2

Package

Model Number	Net Weight (g)	Package Size (mm)	Gross Weight (g)	Carton Size (mm)	Package
HLD503-MWZ-SC-BS-1C-IA-EU-42V-OTA-3.0	194	124*80*38	217	300*300*300	56Pcs/Box
HLD503-MWZ-CT-BS-2C-IA-EU-42V-OTA-3.0	213	124*80*38	266	300*300*300	56Pcs/Box
HLD503-MWZ-SC-BS-PM-1C-IA-EU-42V-OTA-3.0	194	124*80*38	217	300*300*300	56Pcs/Box
HLD503-MWZ-CT-BS-PM-2C-IA-EU-42V-OTA-3.0	213	124*80*38	266	300*300*300	56Pcs/Box

Software Operation

- Power on the gateway, then use the smart remote controller to add the gateway to the G-xxx main group.
- Connect your phone to the same local network as the gateway, open the “iLightsIn Sync” mobile app, log in to your account, then search for and bind the gateway. Select the gateway in the Gateway Management menu.
- On the smart remote controller, select the same main group number G-xxx as the gateway. Aim at the device’s IR receiver and short-press key 5 to join the main group. The luminaires connected to the device will flash twice.
- Short-press key 5 on the remote controller again to report the device. At this time, the device will appear in the device list of the mobile app.
- For more detailed operations, please refer to “iLightsIn Sync User Manual.pdf”.

Device Reset

- Aim the smart remote controller at the device’s IR receiver and short-press key 1 ,then short-press key 3 to reset the device. After the reset is successful, the luminaires connected to the device will flash three times.