

UV Light Emitter

GUVx¹⁾-Light x.x²⁾



Features

- Used UVA & UVC SMD Type LED
- Used HighPower LEDs(UVA(365nm): 1W~2W, UVC(275nm): 0.28W)
- Be easy to carry around in small size
- Rechargeable without battery replacement

Applications

Counterfeit money sensitive machine, Portable false identification machine
Fluorescence brightening agent Detection, Contamination Detected



Fig1. GUA-Light1.0

Fig2. GUC-Light1.0

Fig3. GUA&C-Light1.1

Absolute Maximum Ratings

Parameter	UV LED	Symbol	Value			Unit	Remark
			Min.	Typ.	Max.		
Storage Temperature	UVA	T _{st}	-40		100	°C	T _j > 125 °C (Junction Temperature)
	UVC		-40		100	°C	
Operating Temperature	UVA	T _{op}	-10		85	°C	
	UVC		-30		60	°C	

Case Dimensions

Model	Size(mm) (Width * Length* Height)	Weight (g)	Body (Aluminium)
GUA-Light1.0	105 * 80 * 30	300	AL6061
GUC-Light1.0	116 * 89 * 42	490	AL6061
GUA&C-Light1.1	116 * 89 * 42	490	AL6061

Electro-Optical Characteristics

Parameter	Model	Symbol	Value			Unit	Remark
			Min.	Typ.	Max.		
External Voltage	GUA-Light1.0	V _{cc}		5		V	Micro USB 5pin Charging Cable
	GUC-Light1.0	V _{cc}		16.8		V	Dedicated charger
	GUA&C-Light1.1	V _{cc}		16.8		V	Dedicated charger
UV LED Wevelength	UVA	λ _p	360	365	370	nm	Peak Wavelength(λ _p) : ±3.0nm
	UVC	λ _p	270	275	280	nm	
Charging Battery	GUA-Light1.0	V _{cc}		3.7		V	Maximum Charging Voltage : 4.2V
	GUC-Light1.0	V _{cc}		16.8		V	Maximum Charging Voltage : 16.8V
	GUA&C-Light1.1	V _{cc}	0	16.8		V	

1) UVLED Type

2) Model Version Number

Partial Name by Model & Dedicated charger(Charging Cable)

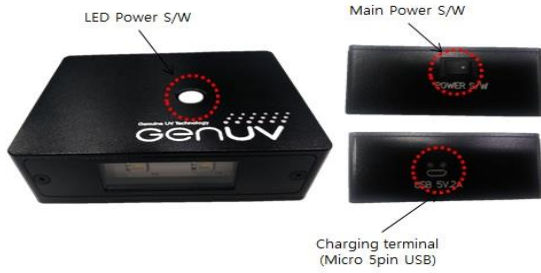


Fig4. GUA-Light1.0



Fig5. GUV-Light1.0



Fig6. GUA&C-Light1.1



Fig7. GUA-Light1.0 Micro USB 5pin Charging Cable(Provision)

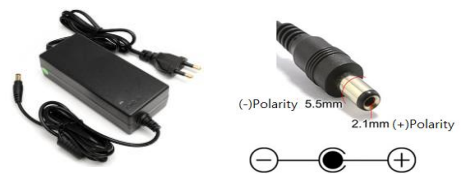


Fig8. GUV-Light1.0 & GUA&C-Light1.1 Dedicated charger(Provision)

Example of Using the UV Light Emitter



Fig9. UV Light Emitter Response



Fig10. Fluorescent response color according to UV wavelength



Fig11. Fluorescent printing reaction of Passport(Fake Passport Identification)