LinkU
Make A Better Link

User Guide
Version: 1.0

Optical Power Meter

LPV Series

www.LINKUTEL.com

WARNINGS

Any unauthorized modifications will result in the loss of your warranty rights for this device.

To reduce the risk of fire or electric shock, do not expose this device to rain or humid environments.

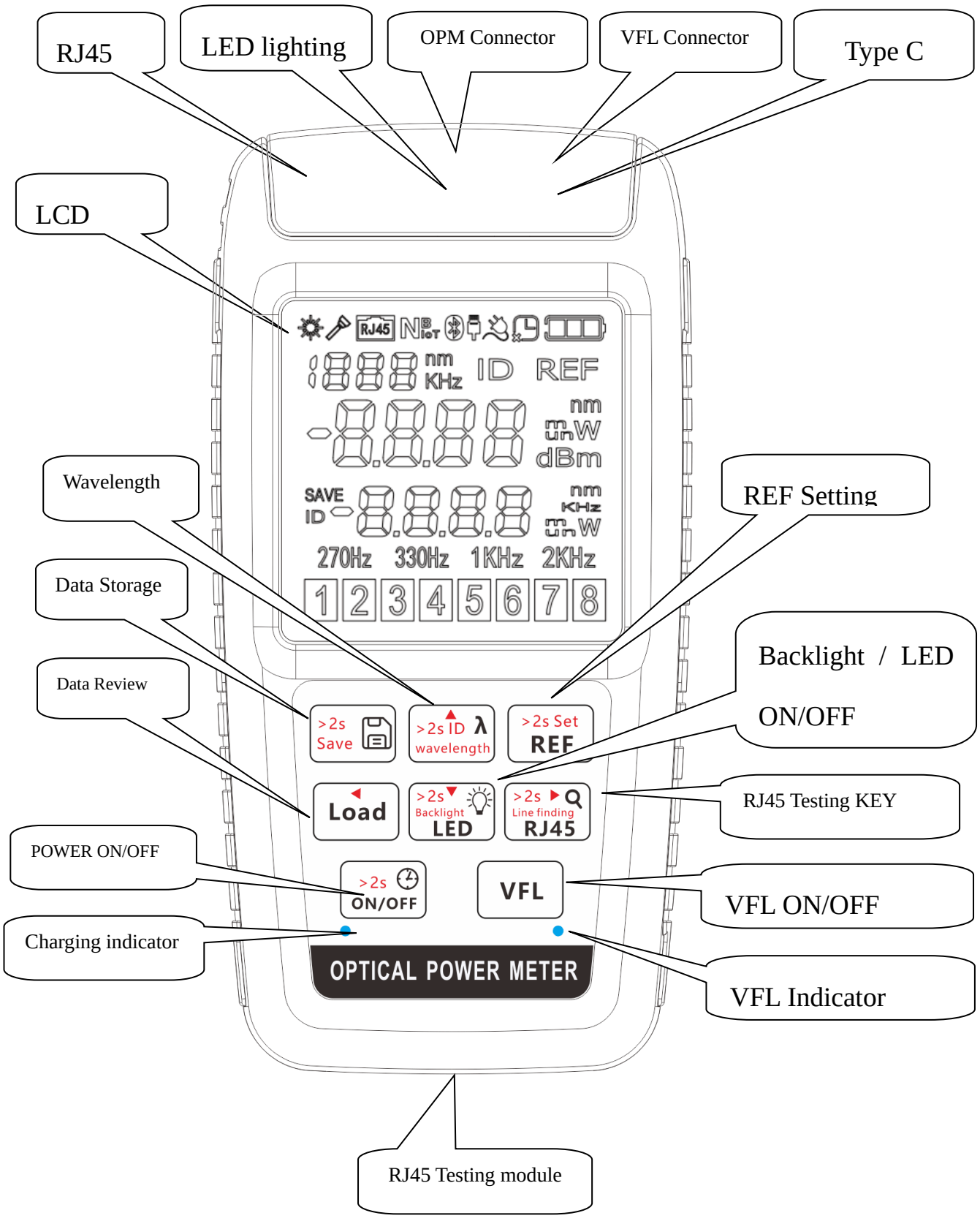
To prevent electric shock, please do not open the casing and it must be repaired by qualified personnel only.

Do not attempt to disassemble the casing or look directly at the laser output port to avoid eye injury

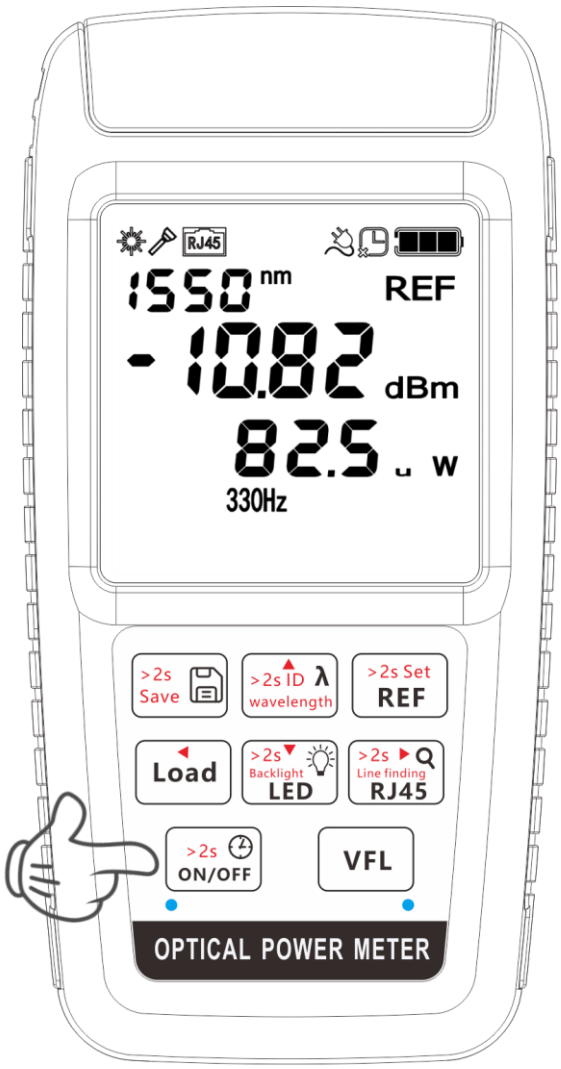
Avoiding Condensation

Sharp temperature changes should be avoided as much as possible. Do not use the device immediately after moving it from a cold place to a hot place, or when the room suddenly heats up, as condensation may form inside the device.

Appearance


RJ45
LED lighting
OPM Connector
VFL Connector
Type C
LCD
Wavelength
Data Storage
Data Review
REF Setting
Backlight / LED ON/OFF
RJ45 Testing KEY
POWER ON/OFF
VFL ON/OFF
Charging indicator
VFL Indicator
RJ45 Testing module
nm
KHz
ID
REF
dBm
SAVE
270Hz
330Hz
1KHz
2KHz
1 2 3 4 5 6 7 8
>2s Save
>2s ID λ wavelength
>2s Set REF
Load
>2s Backlight LED
>2s Line finding RJ45
>2s ON/OFF
VFL
OPTICAL POWER METER

Power ON/OFF &. Power-saving

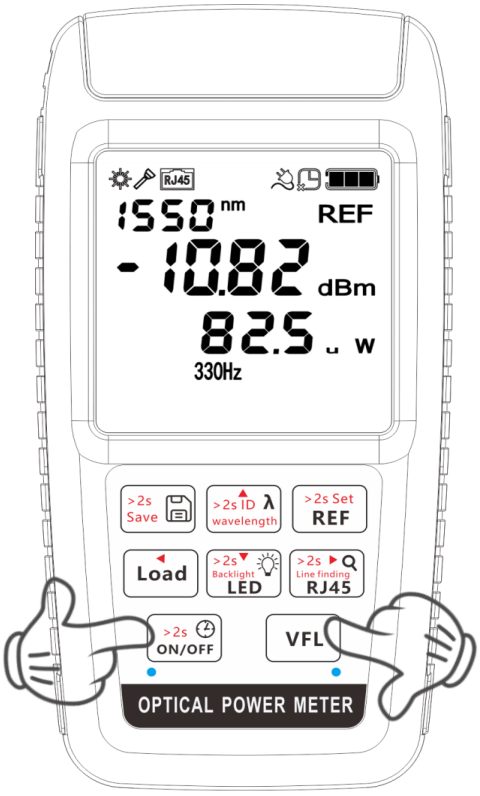


Short press >2s ON/OFF to turn on the device, auto-off mode activated, if there is no button operation in 10 minutes, the instrument will shut down automatically.

Short press >2s ON/OFF to exit or enter auto-off mode while the device is powered on.

Long press >2s ON/OFF to turn on the device with auto-off deactivated. When disappears on the screen, it indicates exit of auto-off mode.

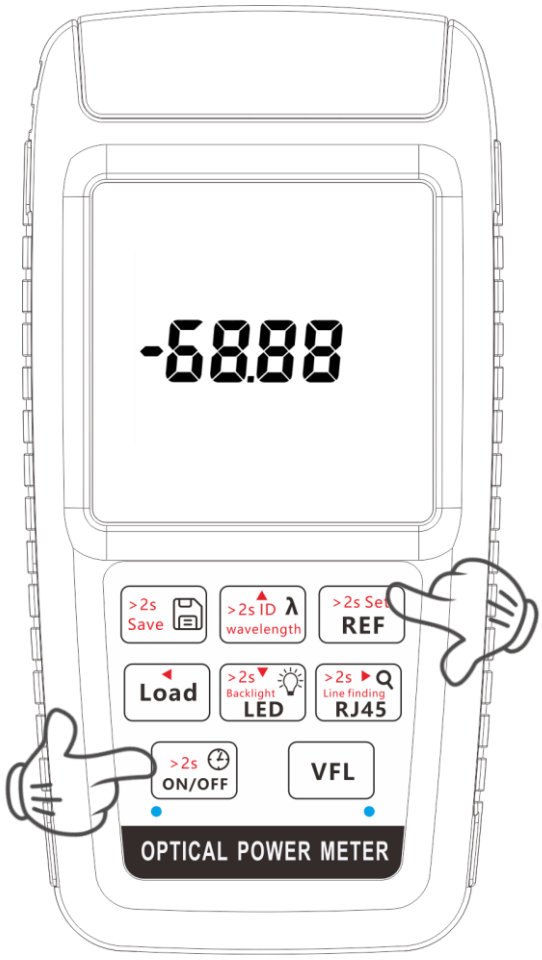
Optical Power Testing and Offset (user self calibration) Setting



In the optical power meter mode, short press [>2s Set REF] to switch the optical power unit (dB/dBm) and review the REF value. Long press this key to set the current power value as the new REF value，Short press [>2s ID λ wavelength] to switch measuring wavelengths, long press this key to activate wavelength recognition function.

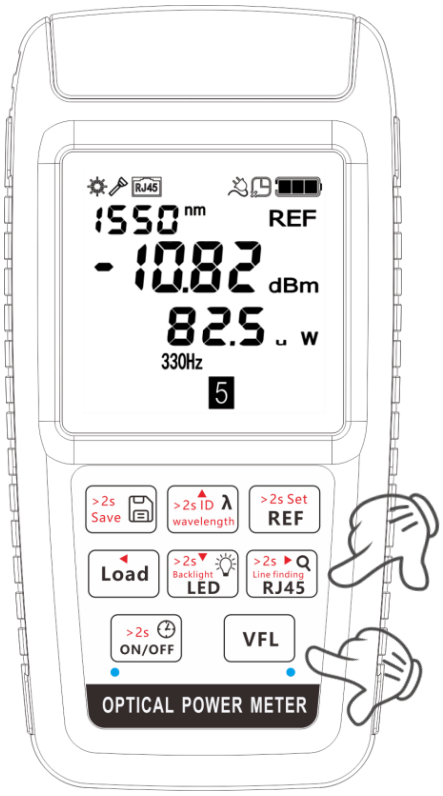
When turning on, long press [>2s ON/OFF] + [VFL] to enter the offset setting interface， short press [Load] + [>2s Line finding RJ45] to set offset value (setting range [-10 ~ +10]dB). Short press [>2s ID λ wavelength] to switch wavelengths and set the offset at different wavelengths. After completing settings, press [>2s ON/OFF] to exit, then turn off the device, and the new offset values will be saved automatically.

Restore Factory Settings



When turning on, press >2s Set REF + >2s ON/OFF for 2 seconds， the system will restore the factory settings. The screen will display: -68.88, indicating successful recovery. The restored information include: 1) all REF values are reset to zero; 2) all offset values are reset to zero; 3) the measuring wavelength is set to 1550nm.

VFL / Ethernet Tester / LED Lighting



After turning on,short press VFL to cycle switch the status of VFL: ON/2Hz Flashing/OFF.

Short press >2s Line finding RJ45 to turn ON/OFF RJ45 pairing mode. the symbols ①②③③⑤⑥⑦⑧ will light up in a loop and RJ45 will be displayed on the screen. Long press >2s Line finding RJ45 to turn ON/OFF RJ45 routing mode, and RJ45 will flash on the screen.

Short press >2s Backlight LED to turn ON/OFF LED lighting, long press >2s Backlight LED to turn ON/OFF the backlight.

Data Storage and Review

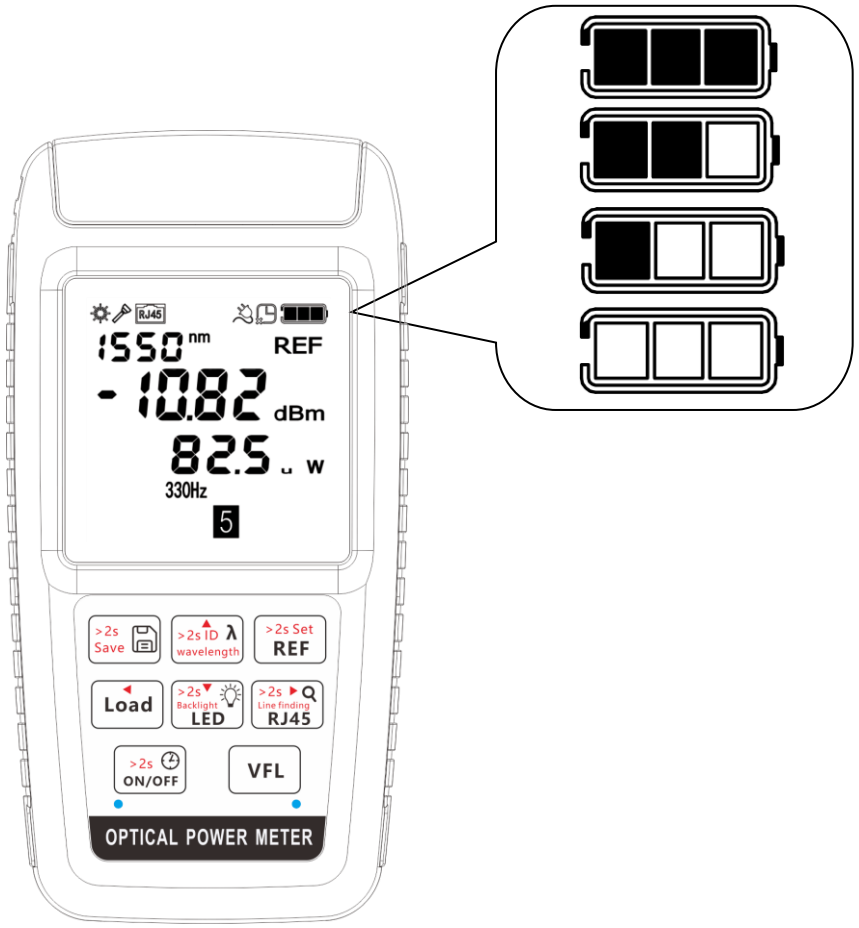
In testing mode, long press >2s Save to save the currently measured data. The instrument can store 500 sets of data, and the storage sequence numbers will automatically accumulate in order. Excess data will not be saved unless previously saved data is deleted first.

Press Load to enter the data review mode, and then press >2s ID λ wavelength and >2s Backlight LED to review the data records.

Delete data:

1. Connect the PC software to the computer via USB cable and delete the stored data through the computer ;
2. When turning on, press >2s Save and >2s ON/OFF to enter the data deletion interface, then long press >2s Save to delete the stored data.

Power Indicator

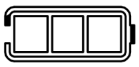


Power Indicator:

 Remaining Power: 80%~100%

 Remaining Power: 40%~80%

 Remaining Power: 20%~40%

 Remaining Power: < 20%

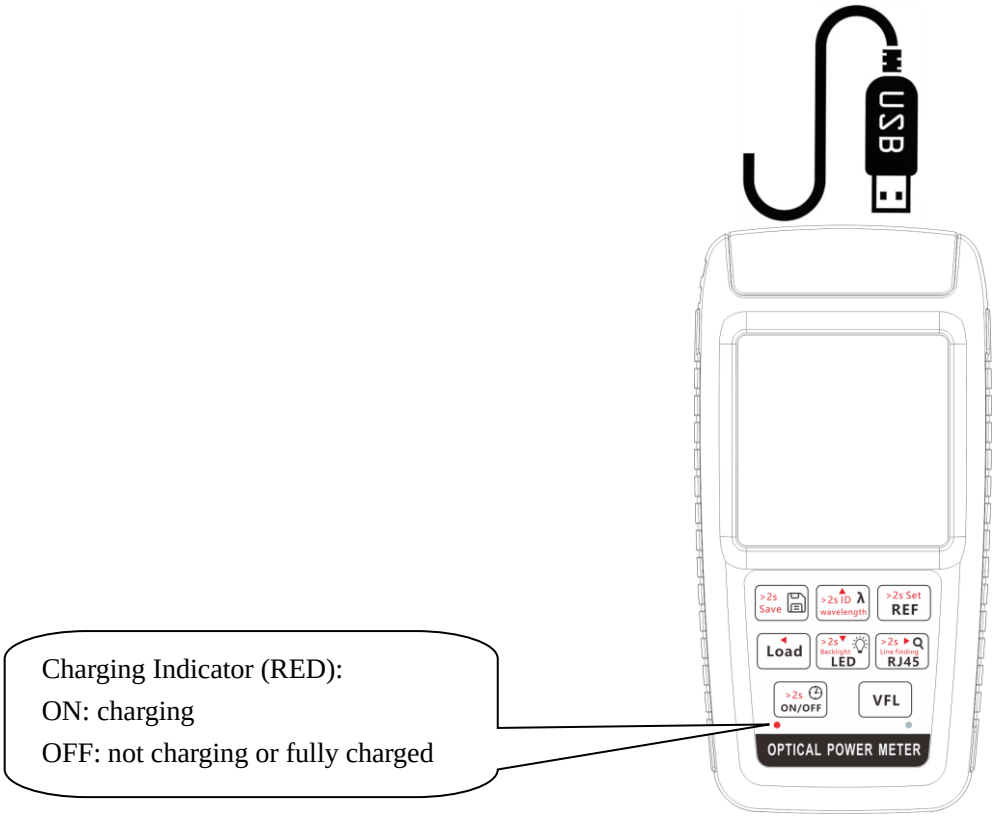
Battery Charging

This instrument can be powered by dry battery and lithium battery. The dry battery is strictly prohibited from charging, while the lithium battery can be charged and please refer to the following instructions:

1. When the power is low, the instrument should be turned off in time for charging, Long term under voltage will lead to short battery life or even damage to the battery。
2. Charging should be done by connecting a Type C cable to power adapter / power bank / computer USB port (5V/1A), the charging time should not exceed 12 hours.

Attention:

Do not use non-standard fast charging. Otherwise, if this device is damaged as a result, it will not be covered by warranty.



Specification

module	Type A	Type C
Detector Type	InGaAs	
Connector	2.5mm universal connector	
Measurement wavelength	850/1270/1300/1310/1490/1550/1577/1610/1625/1650nm	
Measurement range	-70~+10dBm@1550nm	-50~+26dBm@1550nm
Accuracy	±0.3dB@1550nm	
Resolution	0.01	
Modulation Detection	270Hz/330Hz/1kHz/2kHz	
Data Storage	500	
User Self-calibration	YES	
REF	YES	
Black Light	YES	
VFL Connector	2.5mm universal connector	
VFL Type	650±20nm(Red)	515±30nm(Green)
Optional power output	5/10/20/30/50mW	5/10/20mW
Operation Mode	CW/2Hz	
Network Application	UTP network cable	
Interface	RJ45(UTP/8P8C)	
Testing Type	Network line sequence and routing	
Testing Distance	600m	
Battery	2*AA batteries (Optional lithium battery version)	
PC soft	YES	
PC software Settings function	YES	
Users can set commonly used display wavelengths through software，Unused wavelengths can be hidden		

Specification

Auto-off	Yes(no operation in 10 minutes)
Low Battery Indicator	Battery level
Charging Socket	Type C USB
Ambient Temperature	-10℃~+50℃ <90%RH
Storage temperature	-20℃~+70℃ <90%RH
Size/weight	133L×67W×38H(mm) / 150g（including batteries）
Attachment	Dry battery (or lithium battery: installed inside the machine), instruction manual, hanging rope, Type C data cable

***At 25℃+2℃,40%-60%RH, with standard testing fiber**

***Accuracy range:**

TYPE A:+3dBm~-60dBm,Others as following:

± 0.8dB:+3dBm~+6dBm，-60dBm~-65dBm

± 2.0dB:+6dBm~+10dBm，-65dBm~-70dBm

TYPE C:+3dBm~-40dBm,Others as following:

± 0.8dB:+23dBm~+26dBm，-40dBm~-45dBm

± 2.0dB:+20dBm~+26dBm，-45dBm~-50dBm

***Testing distance will be influenced by environment and visual sensitivity**