



# User's Guide to the MT500 Series Multifunctional OPM



[www.grandwaytelecom.com](http://www.grandwaytelecom.com)

## Introduction

The MT500 series of multifunctional optical power meters of Grandway integrates the functions of optical power meter, VFL, RJ45 network cable test, flashlight and other functions. The design is small and lightweight, sturdy and durable, and is suitable for applications such as FTTH broadband installation and maintenance test and optical fiber network cable comprehensive test.

## Features

- Stable and reliable, sturdy and durable
- Multifunction in one (optical power meter, VFL, RJ45 network cable test, flashlight)
- Universal optical interface SC/FC/ST
- Multi-unit display dBm/dB/mW
- Support relative value measurement function
- Support user calibration function
- Support USB interface charging (optional)
- Support over 80 hours of continuous use time(only OPM mode)
- Smart power saving



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## Model

Dry battery version

Model	Test Range	Calibrated Wavelength	Accuracy	VFL output power
MT500-A2	-70dBm~+10dBm@1550nm	850/1300/1310/1490/ 1550/1625/1650nm	$\pm 0.35\text{dB}$	2mW
MT500-A10				10mW
MT500-B2				2mW
MT500-B10				10mW

Rechargeable battery version

Model	Test Range	Calibrated Wavelength	Accuracy	VFL output power
MT500-A2-C	-70dBm~+10dBm@1550nm	850/1300/1310/1490/ 1550/1625/1650nm	$\pm 0.35\text{dB}$	2mW
MT500-A10-C				10mW
MT500-B2-C				2mW
MT500-B10-C				10mW

Warning: When using dry battery for power supply, it is forbidden to connect external power adapter to prevent danger.

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## Specifications

### OPM

Detector Type	InGaAs
Working Wavelength	800nm~1700nm
Display Resolution	0.01dBm
Frequency Identification	270Hz/330Hz/1kHz/2kHz
Optical Port	2.5mm universal FC/SC/ST

### VFL

Working Wavelength	650nm $\pm 30\text{nm}$
Output Mode	CW/1Hz/2Hz
Optical Port	2.5mm universal FC/SC/ST

### Others

Battery	Lithium battery, support dry battery or Ni MH battery
Continuous working time	80 hours(only OPM mode)
Auto Power-off	10 minutes
Working Temp	-10°C~+50°C
Storage Temp	-25°C~+70°C
Storage Humidity	0~95% (No condensation)
Dimension	104L×67W×28H(mm)
Weight	140g

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## Panel Definition



KEY	Short press	Long press
K1	Power on(short press when power on to disable auto-off function) Save current calibrated value in Calibration mode	Power off
K2	Enter/quit data history mode	Save current optical value
K3	Switch optical power display unit Increase 0.05dB in Calibration mode Display last data in history mode	Set current optical power as Reference value
K4	VFL button, switch CW/1Hz/2Hz working mode Decrease 0.05dB in Calibration mode Display next data in history mode	Switch mode: Single/Twin
K5	Turn on/off screen Backlight	Electric torch
K6	Wavelength switch: 850/1300/1310/1490/1550/1625/1650nm	
K2+K5	Enter/quit Calibration mode	
K3+K5	Restore factory calibration value settings	

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## Interface Description



No	Icon	Description
1	VFL	VFL interface
2	●	LED flashlight
3	OPM	Optical power meter interface
4		Type-C USB charging port
5		RJ45 interface and RJ45 far-end module, used for network line sequence pairing

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## Maintenance

- Dry battery version do not charge the machine.
- It is recommended to clean the connector of the instrument and the patchcord when they get dirty through use. Optical cleaning pads and anhydrous alcohol is recommended. And please be careful not to get the detergent inside the instrument.

## How to open the MT500 top cover!



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MANUAL



SOFTWARE

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