



(Optical Multi Meter)  
**User' s manual**

Thank you for choosing V30 Optical Multi Meter produced by INNO!

This manual is only subject to the users who have already purchased V30 Optical Multi Meters. Copying any part of this manual without any written permission by publisher is forbidden.



# Chapter 1 Overview



- 1. Optical fiber connector  
( standard FC )
- 2. LED lamp
- 3. VFL interface ( 2.5mm UPP )
- 4. LCD
- 5. Button for wavelength selection  
(available under " OPM " function)

6. Flicker on/off (available  
under the functions of " VFL " or " LED " )

7. Power on/off or function  
selection button

8. Test indicator for network  
cable connection system

9. Mini USB charger socket

10. RJ45 network test socket

11. RJ11 phone line test socket

- ❖ Size: 124×53×33 (L×W×H)
- ❖ Weight: 155g

# Chapter 2 Parameters

Parameters		
Optical Power Meter(OPM)	Type of detector	InGaAs
	Type of optical fiber interface	2.5mm of ST/SC/FC universal connectors
	Calibrated wavelengths	850/1300/1310/1490/1550/1625nm
	Measuring range	from +6 to -70dBm
	Accuracy	$\pm 0.02\text{dB}$
	Linearity	$\pm 2\%$
	Units	dBm、mW、 $\mu\text{W}$
Visual Fault Locator (VFL/ VLS)	Output power	1mW
	Type of optical fiber interface	5KM of single mode fiber(SMF)
	Radiation safety class	Class 2
	Wavelengths	$650\text{nm} \pm 20\text{nm}$
	Output modes	Continuous /2Hz flicker lasers
	Battery reverse protection function	Available
Network cable /phone line test	Type of interface	RJ45/RJ11
	Applicable network / phone lines	UTP CAT-5/CAT-5e (2/4/6-core phone lines)
	Max.test distance	1KM
Operating temperature		from -10℃ to +60℃
Storage temperature		from -20℃ to +70℃
Relative humidity		<90% (non-condensing)

# Chapter 3 Functions

## 3.1 power-on and power saving function:

Power-on:

Quickly press “MODE” key to turn on the instrument.

Power-off:

Press and hold “MODE” key for 2 seconds or more until “OFF” displays on the screen.



Note: This instrument will shut down automatically without receiving any operation instruction for 10 minutes.

PERM

Function selections:

It defaults to be under “OPM” function when power-on. 4 functions including “OPM”, “VFL”, “LED” and “network cable /phone line tester” will be switched in loop mode.

## Power saving function:

This instrument will shut off automatically after waiting but without receiving any operation instruction for about 10 minutes. If you want to disable this auto shut-off function and keep this instrument working, please press and hold the “MODE” button immediately when power on for about 2 seconds until “PERM” appears on the bottom right screen of the LCD, meaning that the power saving function has been canceled.

## 3.2 Function selections:

It defaults to be under “OPM” function when power-on. 4 functions including “OPM”, “VFL”, “LED” and “network cable/phone line tester” will be switched in loop mode.

### 3.3 Optical Power Meter (OPM)

You can switch the measuring optical wavelengths by pressing “T” button under the function of “OPM”. The calibrating wavelengths of this instrument are 850 /1300/1310/1490/1550/1625nm and the units of numeric display include uW and dBm, which can be switched via “U” button.



### 3.4 Visual Fault Locator (VFL)

You can select continuous laser mode or flicker laser mode with 2Hz of flicker frequency under the function of “VFL”.



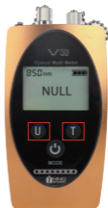
### 3.5 LED lamp

You can select continuous light mode of LED or flicker mode of SOS coding by pressing “U” button under the function of LED.



### 3.6 Null Function Description

Tighten the OPM dust cap. “NULL” appears when “T” button and “U” button are pressed at the same time in OPM model.



### 3.7 Network cable/phone line test



————— Remote module

The “Network cable/ phone line test”(NET) function is used in network generic wiring and for verifying the link on-off condition of network including the sequence of testing cable connection systems. Test will begin when this NET function is enabled; the 8 indicators are used for indicating the sequence of testing cable connection systems. When the network cable or phone line is connected to this instrument and remote model, 8 indicators will blink in turn.

Any calibration, maintenance or repair to this instrument should be carried out by qualified maintenance staff.

Please contact with INNO customer engineer or access to the following website for consultation:

**[www.innoinstrument.com](http://www.innoinstrument.com)**

Tel: +82 32 837 5600

Fax: +82 32 837 5601

Email: [info@innoinstrument.com](mailto:info@innoinstrument.com)

**Company: INNO Instrument Inc.**

**Address: E-22F, 30, Songdomirae-ro, Yeonsu-gu,  
Incheon21990, Republic of Korea**