

# Opticis Optical USB Extension Module

(M2-100 User's Manual)





# Contents

---



## Precautions

- 1. Package Content**
- 2. Introduction**
  - 2.1 Function**
- 3. Installation**
  - 3.1 Set-up**
  - 3.2 Connection**
- 4. Trouble Shooting**
- 5. Specifications**
  - 5.1 Opticis Optical USB Extension Module**
  - 5.2 AC-To-DC**
- 6. Warranty**



# Precautions



## WARNING

---

Do not dismantle the housing or modify the module.

**Dismantling the housing or modifying the module may result in electrical shock or burn.**

Refer all servicing to qualified service personnel.

**Do not attempt to service this product yourself as opening or removing housing may expose you to dangerous voltage or other hazards.**

Keep the module away from liquids.

**Spillage into the housing may result in fire, electrical shock, or equipment damage. If an object or liquid falls/spills into the housing, unplug the module immediately. Have the module checked by a qualified service engineer before using it again.**

Do not touch the powered transmitter(Tx) and powered receiver(Rx) at the same time.

**M1-100 module is designed for long distance connection, so the Tx and Rx is isolated electrically. Touching the powered transmitter and powered receiver at the same time may result in electrical shock.**

Do not touch the module with wet hands.

**Touching the housing and plug with wet hands is dangerous and can cause electrical shock.**



# 1. Package Contents

---

## 1.1 Opticis Optical USB Module Module(M2-100)



## 1.2 AC-To-DC Adapter





## 2. Introduction

---

Our Optical USB Extension Module M2-100 links the USB signal up to 50 meter without any repeater.

### 2.1 Function

- Application with self-powered
- One Up-Stream Module, A Socket, One Down-Stream Module
- Compatible with USB 1.1 (12Mbps, 1.5Mbps)



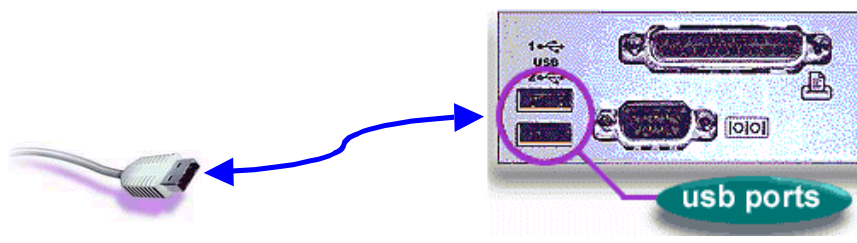
## 3. Installation

### 3.1 Set-Up

- Hard Ware Condition : PC applied by USB ports.
- Soft Ware Condition : Window 98, Window Me, Windows 2000
- AC-To-DC Adapter Requirements : 5 V, 600mA (Core is 5 V)

### 3.2 Connection

- Connect M2-100 with the adapter.
- Connect “A” plug in M2-100 with PC’s USB ports(Figure.1)
- Connect USB peripheral device(key board, mouse, camear Etc) with USB downstream port(A Receptacle)



(Figure.1)



## 4. Trouble shooting

---

**If you are to check out its functioning, pls take action as below. When a problem is found, apply the suggested remedies on the next page.**

- 1. Select the menu “Start “ from Window.**
- 2. “Setting”→“Control Panel”, and then double-click “System”.**
- 3. Select the tab “ Device Manager”.**
- 4. Make“ USB Controller” expanded by clicking “+” next to “ USB Controller” in “Device Manager” (If this item is not, pls refer to problem #1 from the solution table.)**
- 5. Click and select “General USB Hub”.**  
**(If this item is not, pls refer to problem #2 from the solution table.)**
- 6. Click and select “Property”.**
- 7. Make sure the sentence “ Installation functions rightly” is shown in “ Installation state”.**
  - a) In this case, you can see “Opticis Optical USB Extension Module” is functioning well.**  
**If other equipments connected with “Opticis Optical USB Extension Module” don’t work, pls refer to problem #4 from the solution table.**
  - b) Otherwise, pls refer to problem #3 from the solution table.**

## \* Solution Table \*

<b>N O</b>	<b>Problems</b>	<b>Expected Causes</b>	<b>Suggested Remedies</b>
<b>1</b>	<b>“USB Controller” is not installed.</b>	<b>Your Window system does not apply for USB.</b>	<b>Contact PC manufacturer and request them to reinforce USB function.</b>
<b>2</b>	<b>“General USB Hub” is not installed by operation system.</b>	<b>Our product, M2-100 is not connected rightly.</b>	<b>Check if downstream port is rightly power-connected and then connect it again after pull-off upstream cable.</b>
<b>3</b>	<b>Opticis Optical USB Extension Module does not work.</b>	<b>Although you perform above described actions, Opticis Optical USB Extension Module does not work rightly.</b>	<b>Try no.2 remedy once more. If it does not work even after, contact Optics service center .</b>
<b>4</b>	<b>An equipment connected to Opticis Optical USB Extension Module does not work.</b>	<b>Although you perform above described actions, the equipment has a problem in itself.</b>	<b>Contact supplier or manufacturer of the equipment for solution.</b>
<b>5</b>	<b>Opticis Optical USB Extension Module is connected but it is shown as “Unrecognizable device”</b>	<b>Downstream part of Opticis Optical USB is not power- connected.</b>	<b>Check if downstream port is rightly power-connected and then connect it again after pull-off upstream cable.</b>





## 5. Specifications

---

### 1) Opticis Optical USB Module (M2-100)

#### **Size (Width x Length x Height)**

**Up-stream:**

**Down-stream:**

**Length (Whole):**

**Packaging:**

#### **Weight:**

**Net weight :**

**Gross weight :**

#### **Power input**

**5V DC 600mA**

#### **Speed**

**High: 12Mbps**

**Low: 1.5Mbps**

### 2) Power – Adapter

**Power input: A.C- 100~240 V, 5060Hz 0.1A**

**Power output: 5C DC 600mA**



## 6. Warranty

---

- **1 (One) Year Warranty**

- **Warranty Limitation and Exclusion**

**Opticis shall have no further obligation under the foregoing limited warranty if the product has been damaged due to abuse, misuse, neglect, accident, unusual physical or electrical stress, unauthorized modifications, tampering, alterations, or service other than by Opticis or its authorized agents, causes other than from ordinary use or failure to properly use the product in the application for which said product is intended.**



\* FCC

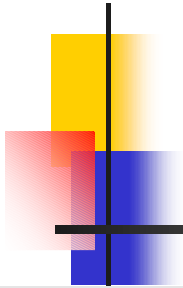
---

### **LABELLING REQUIREMENTS**

This device complies with Part 15 of the FCC Rules.

Operation is subject to the following two conditions:

- (1) this device may not cause harmful interference, and
- (2) this device must accept any interference received,  
including interference that may cause undesired operations.



## INFORMATION TO THE USER

### INFORMATION TO THE USER

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one more of the following measures:

- £ Reorient or relocate the receiving antenna.
- £ Increase the separation between the equipment and receiver.
- £ Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- £ Consult the dealer or an experienced radio/TV technician for help.

### WARNING

Changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment.