NIVEO))
PROFESSIONAL

NMC1012
10/100/1000BaseT to 1000BaseSX Media Converter Series

Quick Installation Guide

FCC Warning

This device has been tested and found to comply with limits for a Class B digital device, pursuant to Part 2 and 15 of FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates and radiates radio frequency energy and, if not installed and used in accordance with the user's manual, it may cause interference in which case users will be required to correct interference at their own expenses.

CE Warning

This is a Class B product. In a domestic environment, this product may cause radio interference in which case the user may be required to take adequate measures.
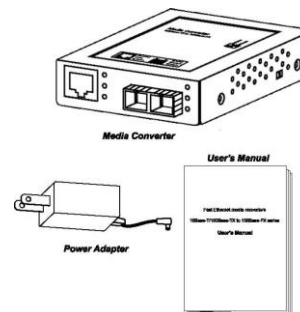
Introduction

This Media Converter is designed to bridge a 1000BaseT signal to a 1000BaseSX signal. It's used to extend the distance connection between two Gigabit Ethernet twisted-pair devices via the fiber cable transparently with no performance degradation.

This Media Converter is based on the switching hub design. It can support Auto-Negotiation and Flow Control function on the twisted-pair port.

Package Contents

Before you start to install this Media Converter, please verify your package that contains the following items:

• One Media Converter
• One Power Adapter
• One Quick Installation Guide

Note: If any of these items is found missing or damaged, please contact your local supplier for replacement.

Key Features

• Compliant with IEEE 802.3ab 10BaseT,IEEE 802.3U100Base TX and IEEE 802.3z 1000BaseSX Gigabit Ethernet Standard
• One 10/100/1000BaseT Gigabit Ethernet TP Port and One 1000BaseSX Gigabit Ethernet Fiber Port
• One 1000BaseSX Gigabit Fiber Port can support either Multi or Single Mode
• TP Port can support Full-Duplex, Auto-MDI/MDI-X and Auto-Negotiation
• Multiple Fiber Connectors Providing 19" Converter Chassis for up to 16 slots with redundant power supply for optional expansion use

LEDs
LED Indicators of Media Converter

LED	Status	Operation
Power	On	Power is on.
	Off	Power is off.
100M/ACT	On	Link on 100M
	Flashing	Data active
1000M/ACT	On	Link on 1000M
	Flashing	Data active
LINK	On	Port is for connection

Installation

DC Input & External Power Adapter
The External Power Adapter specification:
• AC Input range from 90VAC to 260VAC
• AC frequency range from 47Hz to 63Hz, TUV, CE, UL Safety
• Power Adapter DC Output is +5VDC 2A
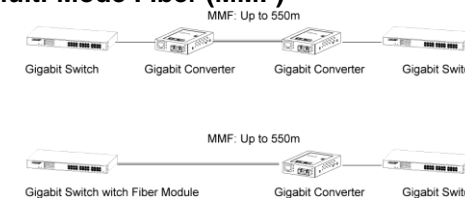• The device DC input +5VDC.

The TP Port
This Media Converter's TP port support Auto-MDIX, Auto-Negotiation and Flow Control functions. Please make sure it can't work in the 10BaseT or 100BaseTX environment and the cable length is up to 100 meters for Cat5, Cat5e or Cat6 shielded/unshielded twisted-pair cable.

The SX Fiber Port
The converter provided SX fiber connector for multi-mode or single-mode fiber cables.
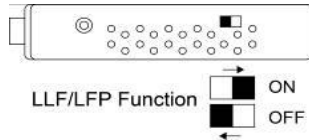
Connections
Multi-Mode Fiber (MMF)

Single-Mode Fiber (SMF)

DIP Switch Setting

LLF/LFP Function — ON / OFF

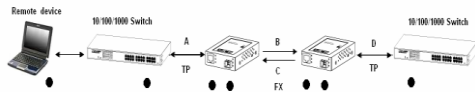### V. Link Fault Pass-through (LFP)Function

When LFP function is enabled, the device of either TP port or fiber port is loose or link, link status on TP port will inform the fiber port of the same device and vice versa. If the TP port is unplugged, the converter stops transmitting over the fiber port, causing the remote fiber node link to fail. The LED will show link failure on both the TP and fiber ports. If the fiber link fails, the converter causes the remote TP node link to fail. The LED also shows the link failure on both the TP and fiber ports. The figures below show normal status when the link succeeds and the error status when TP cable A / D or fiber cable B/C fails to connect.

Normal status via a pair of LFPs

Status if one of all cables A、B、C and D isn't link.

Note:
● indicates LNK/ACT LED On
○ indicates LNK/ACT LED Off

Warning :
When the setting of the DIP switch is changed, the power has to be turned off and the new setting will be effective after turned on again.

Standards	IEEE 802.3ab 10BaseT IEEE 802.3u 100BaseTX IEEE 802.3z 1000BaseSX IEEE 802.3x Flow Control
Features	Number of Ports: 1 10/100/1000BaseT with RJ-45 Connector 1 1000BaseSX with Fiber Connector (Multi/Single Mode, SC Connector)
Data Transfer Rate	2000Mbps/Full-Duplex
Transmission Media	**TP:** 10/100/1000BaseT Cat. 5, 5E, 6 UTP/STP, up to 100 m **1000BaseSX:** 62.5/125µm Multi Mode Fiber optic cable, up to 220 m 50/125µm Multi Mode Fiber optic cable, up to 550 m
LED Indicators	**Per Port:** (TX): Link, TX (FX): Link, RX **Per Unit:** Power
Power Requirement	DC5V/2A
Power Consumption	10 Watts (Max)
Dimensions	102 x 74 x 22 mm (L x W x H)
Weight	240 g
Operating Temperature	0 to 40℃
Storage Temperature	-20 to 90℃
Humidity	10 to 90% RH (non-condensing)
Certifications	FCC Class B, CE