



AC Series Gigabit Ethernet Media Converters



AC1000SC
AC1000SFP
AC1000SC.20
AC1020SC.20

User Manual

Caution

Electronic Circuit devices are sensitive to static electricity. Dry weather conditions or walking across a carpeted floor may cause you to acquire a static electric charge.

To protect your switch, always:

- Touch the metal chassis of your computer to ground the static electrical charge before you handle the switch.
- Pick up the switch by holding it on the left and right edges only.

Electronic Emission Notices

Federal Communications Commission (FCC) Statement

This equipment has been tested and found to comply with the limits for a Class A computing device pursuant to Subpart J of Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference when operated in a commercial environment.

European Community (CE) Electromagnetic Compatibility Directive

This equipment has been tested and found to comply with the protection requirements of European Emission Standard EN55022/EN60555-2 and the Generic European Immunity Standard EN50082-1.

EMC:	EN55022(1988)/CISPR-22(1985)	class A
	EN60555-2(1995)	class A
	EN60555-3	
	IEC1000-4-2(1995)	4K V CD, 8KV, AD
	IEC1000-4-3(1995)	3V/m
	IEC1000-4-4(1995)	1KV – (power line), 0.5KV – (signal line)

Australian RCM Compliance.

This equipment is compliant with the required Australian RCM standards

1. Introduction

Alloy's AC1000 series are the latest edition to the Alloy media converter family. With a cut down feature set from the GCR2000 series, the AC1000 series is designed for price sensitive markets that do not require the added feature set found on the GCR2000 series.

The AC1000 series can be used either as standalone Gigabit Ethernet Media Converters, or can be installed as Media converter Modules in the new ACC1400 series 14-slot Media Converter Chassis. The AC1000 series is one of the most comprehensive Gigabit Ethernet Converter range available, and comprises of models within three broad technology groups:

- UTP to Multimode fibre
- UTP to Singlemode fibre
- Multimode to Single Mode fibre

2. Features

- Standalone and Rackmount Installation
- Ethernet RJ-45 to multimode fibre
- auto-configuring speed/duplex mode
- Rugged, compact all metal case
- 3 Year Warranty

3. Model Description

Model	Description
AC1000SC	10/100/1000Base-TX to 1000Base-SX Multimode Fibre 1310nm (SC) Converter. 2Km
AC1000ST	10/100/1000Base-TX to 1000Base-SX Multimode Fibre 1310nm (ST) Converter. 2Km
AC1000SFP	10/100/1000Base-TX to 1000Base-SX Multimode Fibre (SFP) Converter. SFP Module not included
AC1000SC.20	10/100/1000Base-TX to 1000Base-LX Single Mode Fibre 1310nm (SC) Converter. 20Km
AC1020SC.20	1000Base-SX Multimode to 1000Base-LX Single Mode Fibre (SC) Converter. 20Km

Model	Power Description
TP↔/SC/SFP AC-DC +5V	By AC-DC Adapter

The 1000Mbps Fibre Transceiver	Wavelength
SC multi-mode 2Km	1310nm
SC 20Km single-mode	1310nm
SFP Multimode/Single Mode (SFP Module dependant)	
SC Multimode to Single Mode	MM: 1310nm SM: 1310nm

4. Checklist

Before you start installing your equipment, verify that the package contains the following:

- The AC1000xx Gigabit Ethernet Media Converter
- DC Power Supply
- Warranty Information

Please notify your supplier immediately if any of the aforementioned items are missing or damaged.

5. Installation

Note: When used in the ACC1400 Chassis the Media Converter is hot-swappable.

Wear a grounding device for electrostatic discharge.

As a standalone unit:

⇒ Verify the AC-DC adapter conforms to your country AC power requirement and insert the power plug

For use in the ACC1400:

⇒ Slide the media converter into one of the spare slots on the ACC1400 chassis.

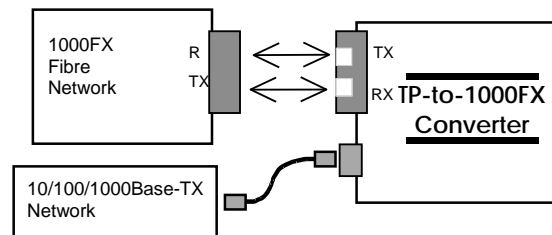


Fig. 1 Basic Network Connection

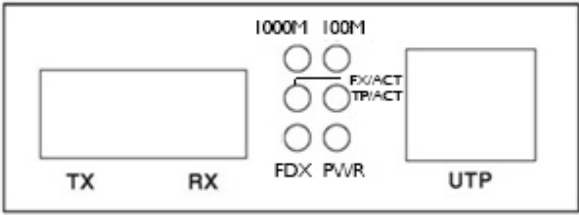


Fig.2 Converter Front Panel for external power

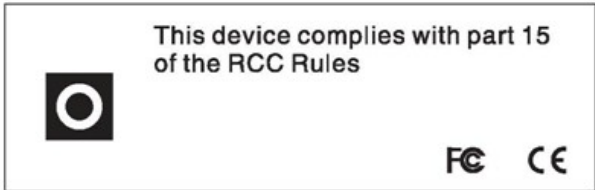


Fig.3 Rear panel

6. LED Description

LED	Status	Function
FX LNK/ACT	On	Lit when fibre connection is good
	Blink	Blinks when fibre data is present
TP LNK/ACT	On	Lit when TP connection is good
	Blink	Blinks when TP data is present
FDX	On	Lit when full-duplex mode is active
	Off	Off when half-duplex is active
PWR	On	Lit when +5V power is active
1000M	On	On when speed is 1000Mbps

7. DC Jack and AC-DC Power Adapter

The DC jack's central post is 2.5mm wide, it conforms to the DC receptacle (2.5mm) on the 19-inch Converter Rack slot.

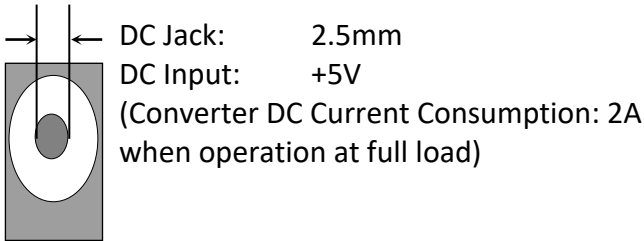


Fig. 4 DC+5V Input Jack and Dimension

Keep the AC-DC adapter as spare parts when Media Converter is installed in a 19-inch Media Converter Rack.

8. Technical Specifications

- **Standards:** IEEE802.3u 10/100Base-TX, IEEE802.3z Gigabit Ethernet, 1000Base-SX/LX
- **UTP Cable:** Cat. 5e or above cable and up to 100m
- **Fibre Cable:** 50/125, 62.5/125 or 100/140 μ m multi-mode
8.3/125, 8.7/125, 9/125 or 10/125 μ m single-mode
- **LED Indicators:** POWER, TP LNK/ACT, FX LNK/ACT, FDX, 1000M
- **Connector:** TX: RJ-45
FX: SC/SFP
- **Speed:** TX: 10/100/1000Mbps
FX: 1000Mbps

- **Data Transfer Rate:**

Speed	Forwarding Rate
1000Mbps	1,488,000 PPS
100Mbps	148,800 PPS
10Mbps	14,880 PPS

- **Flow Control:** IEEE802.3x compliant for full-duplex
- **Wavelength:** Multimode: 1310nm
Single Mode: 20Km 1310nm
- **Power Requirement:** Standalone: 1A@+5VDC from AC-DC Adapter
Rackmount: ACC1400 Chassis
- **Ambient Temperature:** -10° to 55°C
- **Humidity:** 5% to 90%
- **Dimensions:** 26(H) × 70(W) × 94(D) mm
- **Weight:** 225 grams