![ALLOY]

AC Series Fast Ethernet Media Converters

AC100SC
AC100ST
AC100SFP
AC100SC.20
AC120SC.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 AC100 series are the latest edition to the Alloy media converter family. With a cut down feature set from the FCR200 series, the AC100 series is designed for price sensitive markets that do not require the added feature set found on the FCR200 series.

The AC100 series can be used either as standalone Fast Ethernet Media Converters, or can be installed as Media converter Modules in the new ACC1400 series 14-slot Media Converter Chassis. The AC100 series is one of the most comprehensive Fast 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
AC100SC	10/100Base-TX to 100Base-FX Multimode Fibre 1310nm (SC) Converter. 2Km
AC100ST	10/100Base-TX to 100Base-FX Multimode Fibre 1310nm (ST) Converter. 2Km
AC100SFP	10/100Base-TX to 100Base-FX Multimode Fibre (SFP) Converter. SFP Module not included
AC100SC.20	10/100Base-TX to 100Base-FX Single Mode Fibre 1310nm (SC) Converter. 20Km
AC120SC.20	100Base-FX Multimode to 100Base-FX Single Mode Fibre (SC) Converter. 20Km

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

The 100Mbps Fibre Transceiver	Wavelength
ST/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 AC100xx Fast 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:
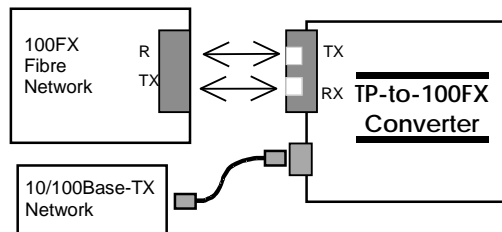⟹ Slide the media converter into one of the spare slots on the ACC1400 chassis.
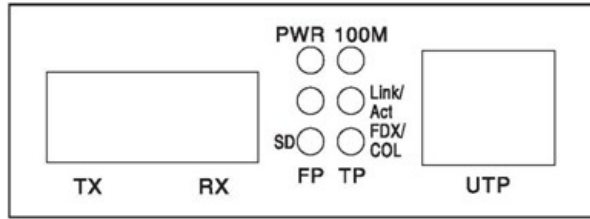

Fig. 1 Basic Network Connection
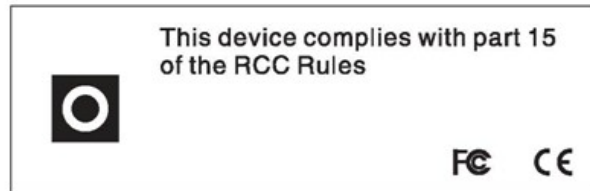
Fig.2 Converter Front Panel for external power

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
SD	On	Fibre signal is active
100M	On	On when speed is 100Mbps
	Off	Off when speed is 10Mbps

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.

DC Jack: 2.5mm
DC Input: +5V
(Converter DC Current Consumption: 2A
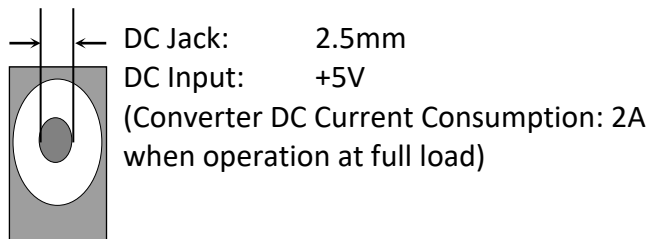when operation at full load)

Fig. 11 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, 100Base-FX

- **UTP Cable:**   Cat. 5e or above cable and up to100m
  Fibre Cable: 50/125, 62.5/125 or 100/140μm multi-mode
                              8.3/125, 8.7/125, 9/125 or 10/125μm single-mode

- **LED Indicators:**   POWER, TP LNK/ACT, FX LNK/ACT, FDX, SD, 100M

- **Connector:**   TX: RJ-45
                              FX: SC/ST/SFP

- **Speed:**   TX: 10/100Mbps
                              FX: 100Mbps

- **Data Transfer Rate:**

Speed	Forwarding Rate
100Mbps	**148,800 PPS**
10Mbps	**14,880 PPS**

- **Flow Control:**   IEEE802.3x compliant for full-duplex
                              Backpressure flow control for half-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