

## PRODUCTS INFORMATION:

- Fiber Media Converter
- 2U 19" Rack Mount Chassis
- Managed Fiber Media Converter
- Managed 2U 19" Rack Mount Chassis

# CONTENTS

## Fiber Media Converter

1*100Base-FX + 1*10/100Base-T(X), Dual Fiber	002-004
1*100Base-FX + 1*10/100Base-T(X), Single Fiber	005-007
1*1000Base-FX + 1*10/100/1000Base-T(X), Dual Fiber	008-010
1*1000Base-FX + 1*10/100/1000Base-T(X), Single Fiber	011-013
1*1000Base-X SFP Slot + 1*10/100/1000Base-T(X)	014-016
1*1000Base-X SFP Slot + 1*10/100/1000Base-T(X)(Mini Type )	017-018

## 2U 19" Rack Mount Chassis

14 Slots 2U 19" Rack Mount Chassis	019-020
16 Slots 2U 19" Rack Mount Chassis	021-022

## Managed Fiber Media Converter

Managed 1*100Base-FX + 1*10/100Base-T(X)	023-025
Managed 1*1000Base-FX + 1*10/100/1000Base-T(X)	026-028

## Managed 2U 19" Rack Mount Chassis

Managed 16 Slots 2U 19" Rack Mount Chassis	029-032
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## JHA-F11 Series

2-port Fiber Media Converter, Dual Fiber, 1-port 100Base-FX and 1-port 10/100Base-T(X)

### Introduction



JHA-F11 series is a dual fiber media converter complies with IEEE802.3 standards, It is designed to convert data signal between 100Base-FX and 10/100Base-TX fast Ethernet.

The media converter is connected between fiber cable and twisted cable, extend your Ethernet network beyond the 100-meter limit imposed by copper cable.

This converter model can be used as slide-in module to the 14-slot 19" Rack-Mount Chassis.

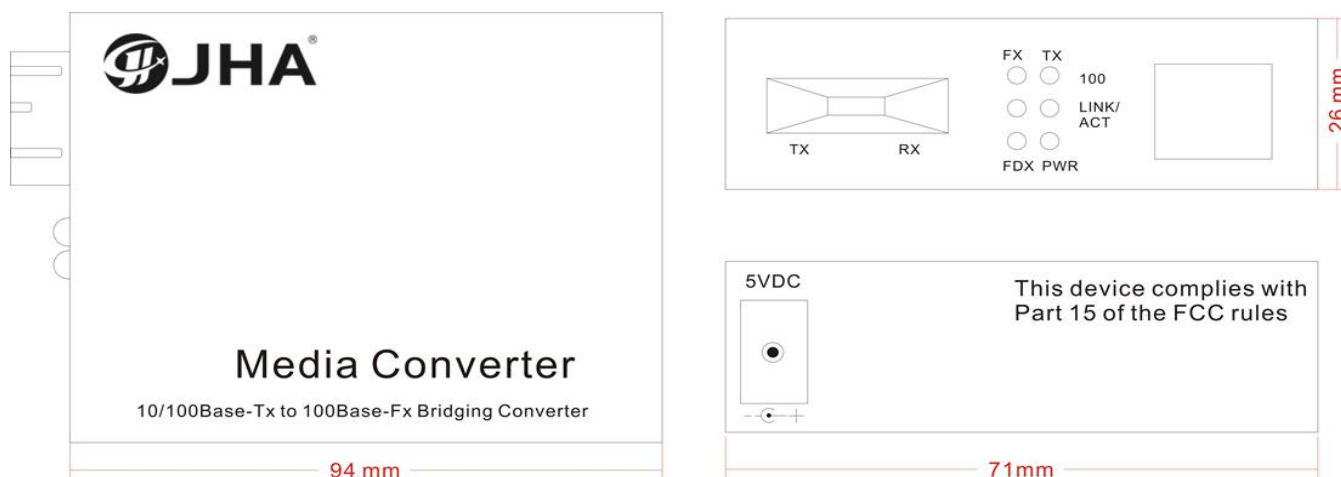
Converter is transparent to all protocols, can be used all all areas as Fiber to The Home, Fiber to the Business or Fiber to The Curb.

### Features

- Compliance with IEEE 802.3, IEEE 802.3u, IEEE 802.3X, IEEE 802.1Q, 10Base-TX, 100Base-TX, 100Base-FX standards.
- It supports TCP / IP, PPPOE, DHCP, ICMP, NAT protocol.
- Flow control: Full duplex using IEEE 802.3X, a standard half-duplex adopt Backpressure.
- Electrical ports support auto-negotiation function, automatically adjusts the transmission and transfer rates.
- Ports support Auto-MDI / MDIX auto-flip.
- Support store and forward mode.
- Supports 10M, 100M mode or adaptive mode.
- Provide status indicators, external power supply (output 5V ~ 50HZ 1A).
- The card design, to facilitate future maintenance and inspection equipment.

- Modular power supply design, function board with separate power supply design, easy to post-maintenance.
- Unique IC solutions, the chip temperature low, to get rid of plus cooling system, flow control and reduce broadcast storms.
- High-quality integrated photovoltaic module provides good optical properties and electrical properties to ensure reliable transmission, long life.
- Operating Mechanism broadcast filtering, address auto-learning and auto-update feature and store and forward.
- It supports up to 1916 byte long data packet transmission.
- Missing link to provide remote diagnostics, electrical interface and optical port link link connection diagnostics, dynamic data transmission, full-duplex / half duplex, speed light, easy installation and later maintenance.
- Ultra-low power consumption of less than 2.5W (Input: AC140 ~ 260V), low heat, stable operation for a long time.

## Dimension



## Specification

<b>Protocol Standard</b>	IEEE802.3, IEEE802.3u, IEEE802.3x Flow control, IEEE802.1q, IEEE802.1p QoS, IEEE802.1d Spanning Tree
<b>Wavelength</b>	850nm/1310nm/1550nm
<b>Transmission Distance</b>	Cat5 100m Multimode, Dual-fiber 2Km Single Mode, Dual-fiber 20/40/60/80/100/120Km
<b>Ethernet Port</b>	RJ45 Ports, Connection STP / UTP Cat5/Cat5e Cooper Cable
<b>Fiber Port</b>	Multimode, Dual-fiber SC/ST/FC (Diameter 50/125, 62.5 / 125μm) Single Mode, Dual-fiber SC/FC (diameter 9/125μm )
<b>Exchange Attribute</b>	Conversion Method: Media conversion, store and forward / straight in MAC Add: 1 K Cache: 1 Mbit Full duplex state: flow control, half-duplex: backpressure mode Store and Forward: 9.6us, Straight In: 0.9us BER: <1/1000000000
<b>LED Indicator</b>	PWR( Power Supply ) FX LINK/ACT FDX ( Ethernet port full / half duplex mode ) TX LINK/ACT ( Ethernet port communication / action ) 100 ( 100/10M transmission rate ) FX ( Optical signal )
<b>Power Supply</b>	Power Input: DC5V1A Full Load: <2.5 W
<b>Working Environment</b>	Operating Temperature: -20~70°C Storage Temperature: -40~70°C Storage Humidity: 5% to 90% non-condensing
<b>Dimension</b>	94*71*26mm ( L * W * H )
<b>Certification</b>	CE, FCC, RoHS
<b>Warranty</b>	3-years

## Order Information

Model No.	Description of Goods
JHA-F11	10/100M Multimode, Dual Fiber, 2Km, SC/ST/FC/LC Connector
JHA-F11-20	10/100M Single-mode, Dual Fiber, 20Km, SC/ST/FC/LC Connector
JHA-F11-40	10/100M Single-mode, Dual Fiber, 40Km, SC/ST/FC/LC Connector
JHA-F11-60	10/100M Single-mode, Dual Fiber, 60Km, SC/ST/FC/LC Connector
JHA-F11-80	10/100M Single-mode, Dual Fiber, 80Km, SC/ST/FC/LC Connector
JHA-F11-100	10/100M Single-mode, Dual Fiber, 100Km, SC/ST/FC/LC Connector
JHA-F11-120	10/100M Single-mode, Dual Fiber, 120Km, SC/ST/FC/LC Connector

## JHA-F11W Series

2-port Fiber Media Converter, Single Fiber, 1-port 100Base-FX and 1-port 10/100Base-T(X)

### Introduction



JHA-F11W series is a single fiber media converter complies with IEEE802.3 standards, It is designed to convert data signal between 100Base-FX and 10/100Base-TX fast Ethernet.

The media converter is connected between fiber cable and twisted cable, extend your Ethernet network beyond the 100-meter limit imposed by copper cable.

This converter model can be used as slide-in module to the 14-slot 19" Rack-Mount Chassis.

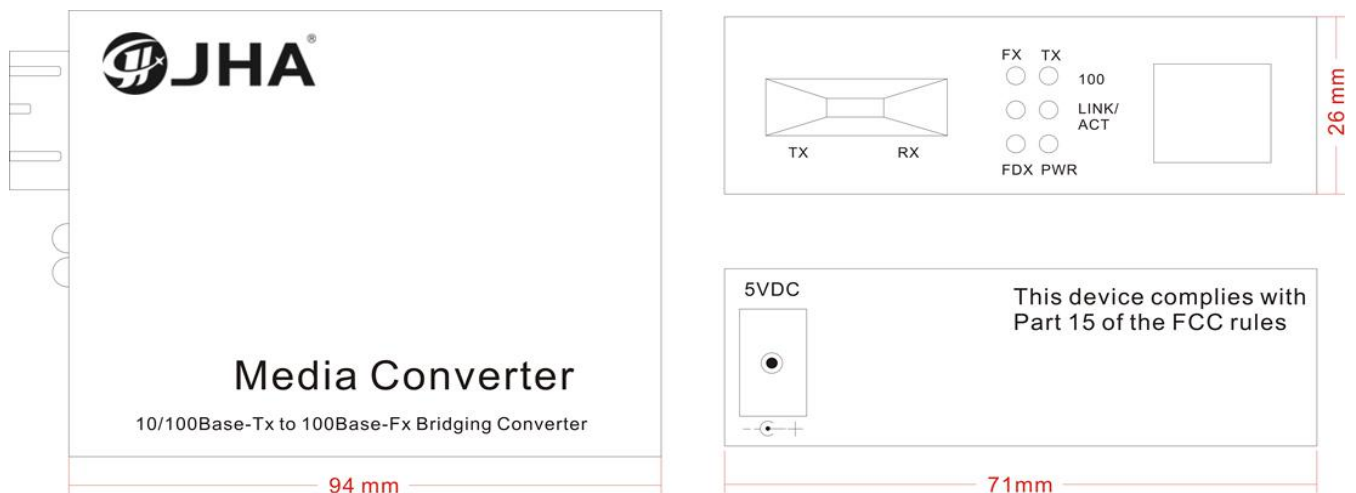
Converter is transparent to all protocols, can be used all all areas as Fiber to The Home, Fiber to the Business or Fiber to The Curb.

### Features

- Compliance with IEEE 802.3, IEEE 802.3u, IEEE 802.3X, IEEE 802.1Q, 10Base-TX, 100Base-TX, 100Base-FX standards.
- It supports TCP / IP, PPPOE, DHCP, ICMP, NAT protocol.
- Flow control: Full duplex using IEEE 802.3X, a standard half-duplex adopt Backpressure.
- Electrical ports support auto-negotiation function, automatically adjusts the transmission and transfer rates.
- Ports support Auto-MDI / MDIX auto-flip.
- Support store and forward mode.
- Supports 10M, 100M mode or adaptive mode.
- Provide status indicators, external power supply (output 5V ~ 50HZ 1A).
- The card design, to facilitate future maintenance and inspection equipment.

- Modular power supply design, function board with separate power supply design, easy to post-maintenance.
- Unique IC solutions, the chip temperature low, to get rid of plus cooling system, flow control and reduce broadcast storms.
- High-quality integrated photovoltaic module provides good optical properties and electrical properties to ensure reliable transmission, long life.
- Operating Mechanism broadcast filtering, address auto-learning and auto-update feature and store and forward.
- It supports up to 1916 byte long data packet transmission.
- Missing link to provide remote diagnostics, electrical interface and optical port link link connection diagnostics, dynamic data transmission, full-duplex / half duplex, speed light, easy installation and later maintenance.
- Ultra-low power consumption of less than 2.5W (Input: AC140 ~ 260V), low heat, stable operation for a long time.

## Dimension



## Specification

<b>Protocol Standard</b>	IEEE802.3, IEEE802.3u, IEEE802.3x Flow control, IEEE802.1q, IEEE802.1p QoS, IEEE802.1d Spanning Tree
<b>Wavelength</b>	1310nm/1550nm
<b>Transmission Distance</b>	Cat5 100m Single Mode, Single-fiber 20/40/60/80/100Km
<b>Ethernet Port</b>	RJ45 Ports, Connection STP / UTP Cat5/Cat5e Cooper Cable
<b>Fiber Port</b>	Single Mode, Single Fiber, SC/ST/FC (Diameter 9/125μm )
<b>Exchange Attribute</b>	Conversion Method: Media conversion, store and forward / straight in MAC Add: 1 K Cache: 1 Mbit Full duplex state: flow control, half-duplex: backpressure mode Store and Forward: 9.6us, Straight In: 0.9us BER: <1/1000000000
<b>LED Indicator</b>	PWR( Power Supply ) FX LINK/ACT FDX ( Ethernet port full / half duplex mode ) TX LINK/ACT ( Ethernet port communication / action ) 100 ( 100/10M transmission rate ) FX ( Optical signal )
<b>Power Supply</b>	Power Input: DC5V1A Full Load: <2.5 W
<b>Working Environment</b>	Operating Temperature: -20~70°C Storage Temperature: -40~70°C Storage Humidity: 5% to 90% non-condensing
<b>Dimension</b>	94*71*26mm ( L * W * H )
<b>Certification</b>	CE, FCC, RoHS
<b>Warranty</b>	3-years

## Order Information

Model No.	Description of Goods
JHA-F11W-20	10/100M Single-mode, Single Fiber, 20Km, SC/ST/FC Connector
JHA-F11W-40	10/100M Single-mode, Single Fiber, 40Km, SC/ST/FC Connector
JHA-F11W-60	10/100M Single-mode, Single Fiber, 60Km, SC/ST/FC Connector
JHA-F11W-80	10/100M Single-mode, Single Fiber, 80Km, SC/ST/FC Connector
JHA-F11W-100	10/100M Single-mode, Single Fiber, 100Km, SC/ST/FC Connector
JHA-F11W-120	10/100M Single-mode, Single Fiber, 120Km, SC/ST/FC Connector

## JHA-G11 Series

2-port Fiber Media Converter, Dual Fiber, 1-port 1000Base-FX and 1-port 10/100/1000Base-T(X)

### Introduction



JHA-G11 series is a dual fiber media converter complies with IEEE802.3 standards, It is designed to convert data signal between 1000Base-FX and 10/100/1000Base-TX Ethernet.

The media converter is connected between fiber cable and twisted cable, extend your Ethernet network beyond the 100-meter limit imposed by copper cable.

This converter model can be used as slide-in module to the 14-slot 19" Rack-Mount Chassis.

Converter is transparent to all protocols, can be used all all areas as Fiber to The Home, Fiber to the Business or Fiber to The Curb.

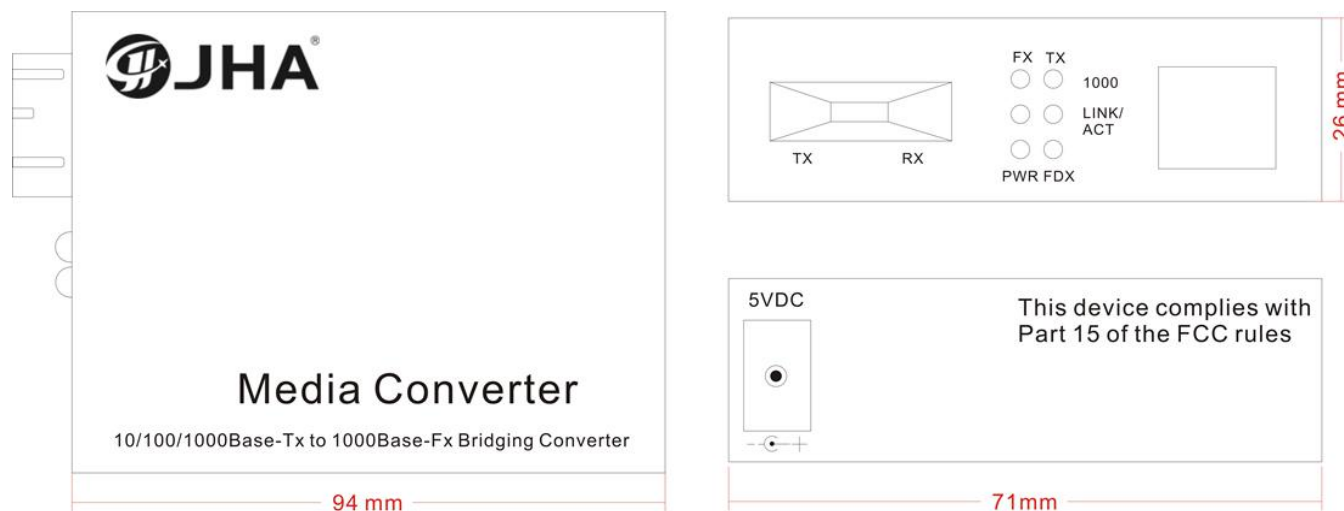
### Features

- Compliance with IEEE 802.3, IEEE 802.3u, IEEE 802.3X, IEEE 802.1Q, 10Base-TX, 100Base-TX, 1000Base-TX, 1000Base-FX standards.
- It supports TCP / IP, PPPOE, DHCP, ICMP, NAT protocol.
- Flow control: Full duplex using IEEE 802.3X, a standard half-duplex adopt Backpressure.
- Electrical ports support auto-negotiation function, automatically adjusts the transmission and transfer rates.
- Ports support Auto-MDI / MDIX auto-flip.
- Support store and forward mode.
- Supports 10M, 100M, 1000M mode or adaptive mode.
- Provide status indicators, external power supply (output 5V ~ 50HZ 2A).
- The card design, to facilitate future maintenance and inspection equipment.



- Modular power supply design, function board with separate power supply design, easy to post-maintenance.
- Unique IC solutions, the chip temperature low, to get rid of plus cooling system, flow control and reduce broadcast storms.
- High-quality integrated photovoltaic module provides good optical properties and electrical properties to ensure reliable transmission, long life.
- Operating Mechanism broadcast filtering, address auto-learning and auto-update feature and store and forward.
- It supports up to 1916 byte long data packet transmission.
- Missing link to provide remote diagnostics, electrical interface and optical port link connection diagnostics, dynamic data transmission, full-duplex / half duplex, speed light, easy installation and later maintenance.
- Ultra-low power consumption of less than 2.5W (Input: AC140 ~ 260V), low heat, stable operation for a long time.

## Dimension



## Specification

<b>Protocol Standard</b>	IEEE802.3, IEEE802.3u, IEEE802.3x Flow control, IEEE802.1q, IEEE802.1p QoS, IEEE802.1d Spanning Tree
<b>Wavelength</b>	850nm/1310nm/1550nm
<b>Transmission Distance</b>	Cat5 100m Multimode, Dual-fiber 550m Single Mode, Dual-fiber 20/40/60/80/100/120Km
<b>Ethernet Port</b>	RJ45 Ports, Connection STP / UTP Cat5/Cat5e Cooper Cable
<b>Fiber Port</b>	Multimode, Dual-fiber SC/ST/FC (Diameter 50/125, 62.5 / 125 $\mu$ m) Single Mode, Dual-fiber SC/FC (diameter 9/125 $\mu$ m )
<b>Exchange Attribute</b>	Conversion Method: Media conversion, store and forward / straight in MAC Add: 1 K Cache: 1 Mbit Full duplex state: flow control, half-duplex: backpressure mode Store and Forward: 9.6us, Straight In: 0.9us BER: <1/1000000000
<b>LED Indicator</b>	PWR( Power Supply ) FX LINK/ACT FDX ( Ethernet port full / half duplex mode ) TX LINK/ACT ( Ethernet port communication / action ) 1000 ( 1000/100/10M transmission rate ) FX ( Optical signal )
<b>Power Supply</b>	Power Input: DC5V2A Full Load: <2.5 W
<b>Working Environment</b>	Operating Temperature: -20~70 $^{\circ}$ C Storage Temperature: -40~70 $^{\circ}$ C Storage Humidity: 5% to 90% non-condensing
<b>Dimension</b>	94*71*26mm ( L * W * H )
<b>Certification</b>	CE, FCC, RoHS
<b>Warranty</b>	3-years

## Order Information

Model No.	Description of Goods
JHA-G11	10/100/1000M Multimode, Dual Fiber, 550m, SC/ST/FC Connector
JHA-G11-20	10/100/1000M Single-mode, Dual Fiber, 20Km, SC/ST/FC Connector
JHA-G11-40	10/100/1000M Single-mode, Dual Fiber, 40Km, SC/ST/FC Connector
JHA-G11-60	10/100/1000M Single-mode, Dual Fiber, 60Km, SC/ST/FC Connector
JHA-G11-80	10/100/1000M Single-mode, Dual Fiber, 80Km, SC/ST/FC Connector
JHA-G11-100	10/100/1000M Single-mode, Dual Fiber, 100Km, SC/ST/FC Connector

## JHA-G11W Series

2-port Fiber Media Converter, Single Fiber, 1-port 1000Base-FX and 1-port 10/100/1000Base-T(X)

### Introduction



JHA-G11W series is a single fiber media converter complies with IEEE802.3 standards, It is designed to convert data signal between 1000Base-FX and 10/100/1000Base-TX Ethernet.

The media converter is connected between fiber cable and twisted cable, extend your Ethernet network beyond the 100-meter limit imposed by copper cable.

This converter model can be used as slide-in module to the 14-slot 19" Rack-Mount Chassis.

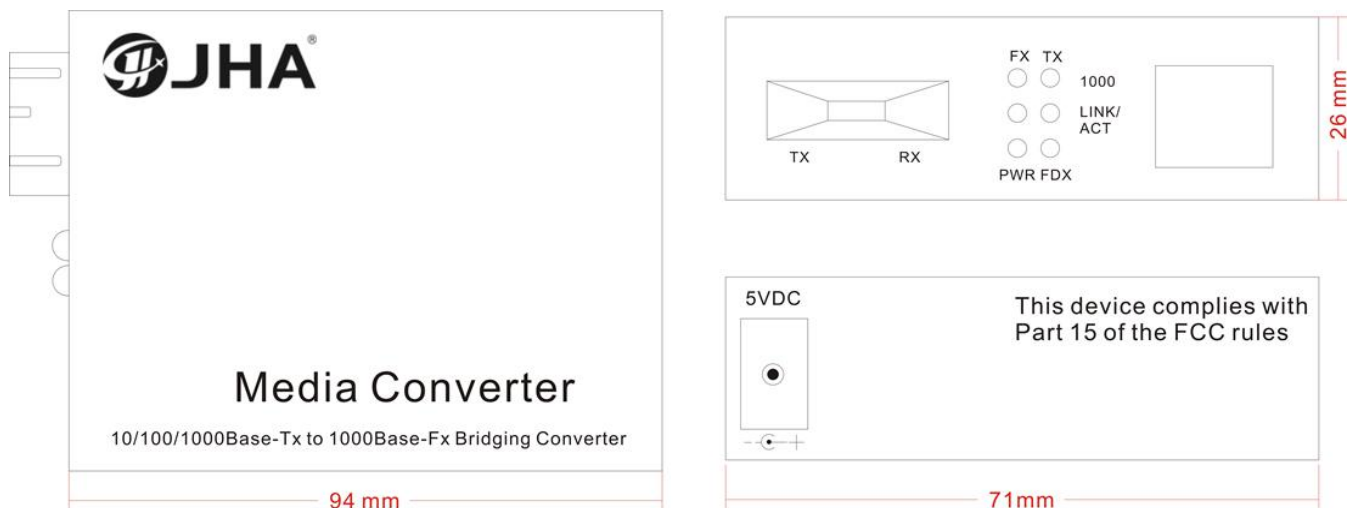
Converter is transparent to all protocols, can be used all areas as Fiber to The Home, Fiber to the Business or Fiber to The Curb.

### Features

- Compliance with IEEE 802.3, IEEE 802.3u, IEEE 802.3X, IEEE 802.1Q, 10Base-TX, 100Base-TX, 1000Base-TX, 1000Base-FX standards.
- It supports TCP / IP, PPPOE, DHCP, ICMP, NAT protocol.
- Flow control: Full duplex using IEEE 802.3X, a standard half-duplex adopt Backpressure.
- Electrical ports support auto-negotiation function, automatically adjusts the transmission and transfer rates.
- Ports support Auto-MDI / MDIX auto-flip.
- Support store and forward mode.
- Supports 10M, 100M, 1000M mode or adaptive mode.
- Provide status indicators, external power supply (output 5V ~ 50HZ 2A).
- The card design, to facilitate future maintenance and inspection equipment.

- Modular power supply design, function board with separate power supply design, easy to post-maintenance.
- Unique IC solutions, the chip temperature low, to get rid of plus cooling system, flow control and reduce broadcast storms.
- High-quality integrated photovoltaic module provides good optical properties and electrical properties to ensure reliable transmission, long life.
- Operating Mechanism broadcast filtering, address auto-learning and auto-update feature and store and forward.
- It supports up to 1916 byte long data packet transmission.
- Missing link to provide remote diagnostics, electrical interface and optical port link connection diagnostics, dynamic data transmission, full-duplex / half duplex, speed light, easy installation and later maintenance.
- Ultra-low power consumption of less than 2.5W (Input: AC140 ~ 260V), low heat, stable operation for a long time.

## Dimension



## Specification

<b>Protocol Standard</b>	IEEE802.3, IEEE802.3u, IEEE802.3x Flow control, IEEE802.1q, IEEE802.1p QoS, IEEE802.1d Spanning Tree
<b>Wavelength</b>	850nm/1310nm/1550nm
<b>Transmission Distance</b>	Cat5 100m Single Mode, Single-fiber 20/40/60/80/100Km
<b>Ethernet Port</b>	RJ45 Ports, Connection STP / UTP Cat5/Cat5e Cooper Cable
<b>Fiber Port</b>	Single Mode, Single-fiber, SC/ST/FC (Diameter 9/125μm )
<b>Exchange Attribute</b>	Conversion Method: Media conversion, store and forward / straight in MAC Add: 1 K Cache: 1 Mbit Full duplex state: flow control, half-duplex: backpressure mode Store and Forward: 9.6us, Straight In: 0.9us BER: <1/1000000000
<b>LED Indicator</b>	PWR( Power Supply ) FX LINK/ACT FDX ( Ethernet port full / half duplex mode ) TX LINK/ACT ( Ethernet port communication / action ) 1000 ( 1000/100/10M transmission rate ) FX ( Optical signal )
<b>Power Supply</b>	Power Input: DC5V2A Full Load: <2.5 W
<b>Working Environment</b>	Operating Temperature: -20~70°C Storage Temperature: -40~70°C Storage Humidity: 5% to 90% non-condensing
<b>Dimension</b>	94*71*26mm ( L * W * H )
<b>Certification</b>	CE, FCC, RoHS
<b>Warranty</b>	3-years

## Order Information

Model No.	Description of Goods
JHA-G11W-20	10/100/1000M Single-mode, Single Fiber, 20Km, SC/ST/FC Connector
JHA-G11W-40	10/100/1000M Single-mode, Single Fiber, 40Km, SC/ST/FC Connector
JHA-G11W-60	10/100/1000M Single-mode, Single Fiber, 60Km, SC/ST/FC Connector
JHA-G11W-80	10/100/1000M Single-mode, Single Fiber, 80Km, SC/ST/FC Connector
JHA-G11W-100	10/100/1000M Single-mode, Single Fiber, 100Km, SC/ST/FC Connector

## JHA-GS11 Series

2-port Fiber Media Converter, 1-port 1000Base-X SFP Slot and 1-port 10/100/1000Base-T(X)

### Introduction



JHA-GS11 series is complies with IEEE802.3 standards, It is designed to convert data signal between 1000Base-X and 10/100/1000Base-TX Ethernet.

The media converter is connected between fiber cable and twisted cable, extend your Ethernet network beyond the 100-meter limit imposed by copper cable.

This converter model can be used as slide-in module to the 14-slot 19" Rack-Mount Chassis.

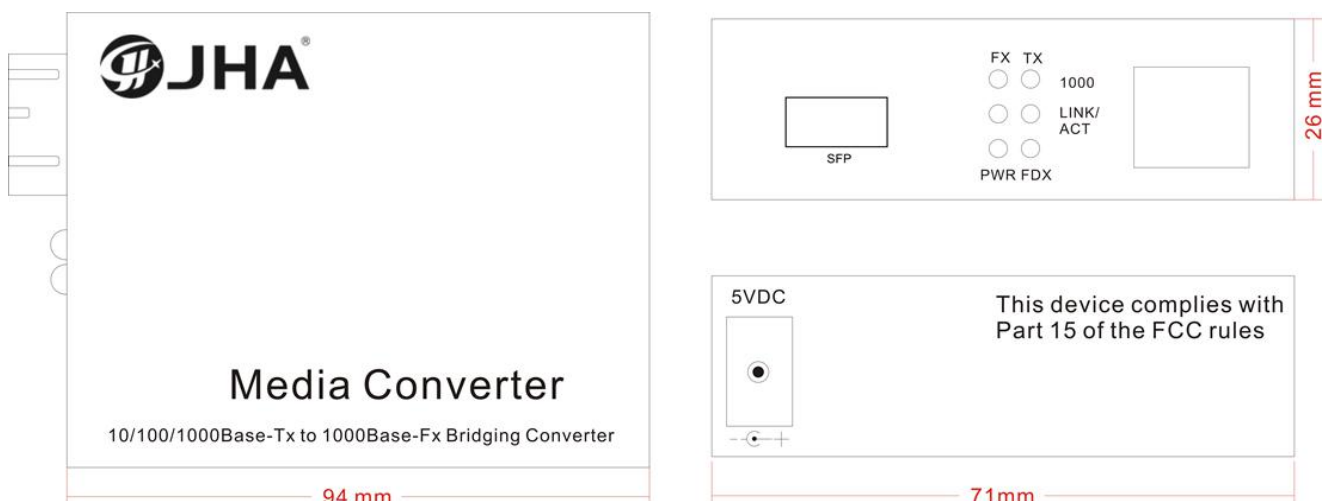
Converter is transparent to all protocols, can be used all all areas as Fiber to The Home, Fiber to the Business or Fiber to The Curb.

### Features

- Compliance with IEEE 802.3, IEEE 802.3u, IEEE 802.3X, IEEE 802.1Q, 10Base-TX, 100Base-TX, 1000Base-TX, 1000Base-FX standards.
- It supports TCP / IP, PPPOE, DHCP, ICMP, NAT protocol.
- Flow control: Full duplex using IEEE 802.3X, a standard half-duplex adopt Backpressure.
- Electrical ports support auto-negotiation function, automatically adjusts the transmission and transfer rates.
- Ports support Auto-MDI / MDIX auto-flip.
- Support store and forward mode.
- Supports 10M, 100M, 1000M mode or adaptive mode.
- Provide status indicators, external power supply (output 5V ~ 50HZ 2A).

- The card design, to facilitate future maintenance and inspection equipment.
- Modular power supply design, function board with separate power supply design, easy to post-maintenance.
- Unique IC solutions, the chip temperature low, to get rid of plus cooling system, flow control and reduce broadcast storms.
- High-quality integrated photovoltaic module provides good optical properties and electrical properties to ensure reliable transmission, long life.
- Operating Mechanism broadcast filtering, address auto-learning and auto-update feature and store and forward.
- It supports up to 1916 byte long data packet transmission.
- Missing link to provide remote diagnostics, electrical interface and optical port link link connection diagnostics, dynamic data transmission, full-duplex / half duplex, speed light, easy installation and later maintenance.
- Ultra-low power consumption of less than 2.5W (Input: AC140 ~ 260V), low heat, stable operation for a long time.

## Dimension



## Specification

<b>Protocol Standard</b>	IEEE802.3, IEEE802.3u, 100Base-TX/FX Fast Ethernet, IEEE802.3x Flow control, IEEE802.1q, IEEE802.1p QoS, IEEE802.1d Spanning Tree
<b>Wavelength</b>	850nm/1310nm/1550nm
<b>Transmission Distance</b>	Cat5 100m Multimode, Single/Dual-fiber 550m Single Mode, Single-fiber 20/40/60/80/100Km Single Mode, Dual-fiber 20/40/60/80/100/120Km
<b>Ethernet Port</b>	RJ45 Ports, Connection STP / UTP Cat5/Cat5e Cooper Cable
<b>Fiber Port</b>	SFP Slot(1.25G SFP Transceiver Module)
<b>Exchange Attribute</b>	Conversion Method: Media conversion, store and forward / straight in MAC Add: 1 K Cache: 1 Mbit Full duplex state: flow control, half-duplex: backpressure mode Store and Forward: 9.6us, Straight in: 0.9us BER: <1/1000000000
<b>LED Indicator</b>	PWR( Power Supply ) FX LINK/ACT FDX ( Ethernet port full / half duplex mode ) TX LINK/ACT ( Ethernet port communication / action ) 1000 ( 1000/100/10M transmission rate ) FX ( Optical signal )
<b>Power Supply</b>	Power Input: DC5V2A Full Load: <2.5 W
<b>Working Environment</b>	Operating Temperature: -20~70°C Storage Temperature: -40~70°C Storage Humidity: 5% to 90% non-condensing
<b>Dimension</b>	94*71*26mm ( L * W * H )
<b>Certification</b>	CE, FCC, RoHS
<b>Warranty</b>	3-years

## Order Information

Model No.	Description of Goods
JHA-GS11	1*1000Base-X SFP Slot + 1*10/100/1000Base-T(X) RJ45 Port



## JHA-GS11M Series

2-port Fiber Media Converter, with 1 100Base-FX Fiber Port and 1 10/100Base-T(X) Ethernet Port

### Features



- Auto negotiation function allows UTP ports to auto select 10/100/1000M and Full Duplex or Half Duplex.
- The UTP port supports the connection of MDI/MDI-X auto crossover.
- Multimode Fiber: the max distance up to 224m/ 550m  
Single mode Fiber: the max distance up to 100km
- Supporting the max 9000 byte Ethernet packet
- Supporting flow control
- Adopting internal power supply



### Introduction

JHA-GS11M is a Gigabit Fiber Media Converter can convert Optical — Electric Ethernet signals between 10/100/1000M UTP interface (TX) and 100/1000M optical fiber interface (FX). The traditional 10/100/1000M gigabit Ethernet can be extended to the distance of 100km through optical fiber link. The performance and quality of the products are excellent because of adopting latest Gigabit IC from USA and Taiwan. 2 Group LED indicated lights could fully monitor the working conditions of converters. It is easy for users to observe and diagnose the failure of converters. Gigabit Converters could be used alone; Converter Standalone should be inserted to 14 slots RACK supplied. which is suitable for the use of Network Centre.

## Specification

Operating standards	IEEE802.3z/AB, 10/100/1000Base-T and 100/1000Base-SX/LX/HX				
MAC addresses table	4K				
Data buffer	256K				
Connectors	UTP: RJ-45,10/100/1000Mbps; Fiber: LC/SC,100/1000Mbps				
Cable	UTP cable:Cat 5e or Cat 6 (the max distance up to 100m) Fiber : multimode : 50/125, 62.5/125μm (the max distance up to 550/224m))				
Flow Control	Full Duplex: IEEE802.3x Half Duplex: back pressure				
Power	AC 220V(170-260V) 50Hz; DC 5~12V				
Ambient temperature	0 ~ +50°C				
Storage temperature	-20 ~ +70°C				
Humidity	5 ~ 90%				
Dimensions	External Power: 24 (high) x 50 (width) x 69 (length) mm				
DIP SWITCH		Switch	Function	Switch	Function
	Switch 1	OFF	Disable Link Fault Pass-Through	ON	Enable Link Fault Pass-Throughl
	Switch 2	OFF	Switch mode	ON	Converter mode (9k)
	Switch 3	OFF	Flow control disable	ON	Flow control enable
	Switch 4	OFF	FX Speed 1000Mbps	ON	FX Speed 100Mbps

## Order Information

Model No.	Description of Goods
JHA-GS11M	Fiber Media Converter, 1*100Base-X SFP Slot + 1*10/100Base-T(X) RJ45 Port

## JHA-E14 Series

### 14 Slots 2U 19" Rack Mount Chassis for Standalone Media Converter

#### Introduction

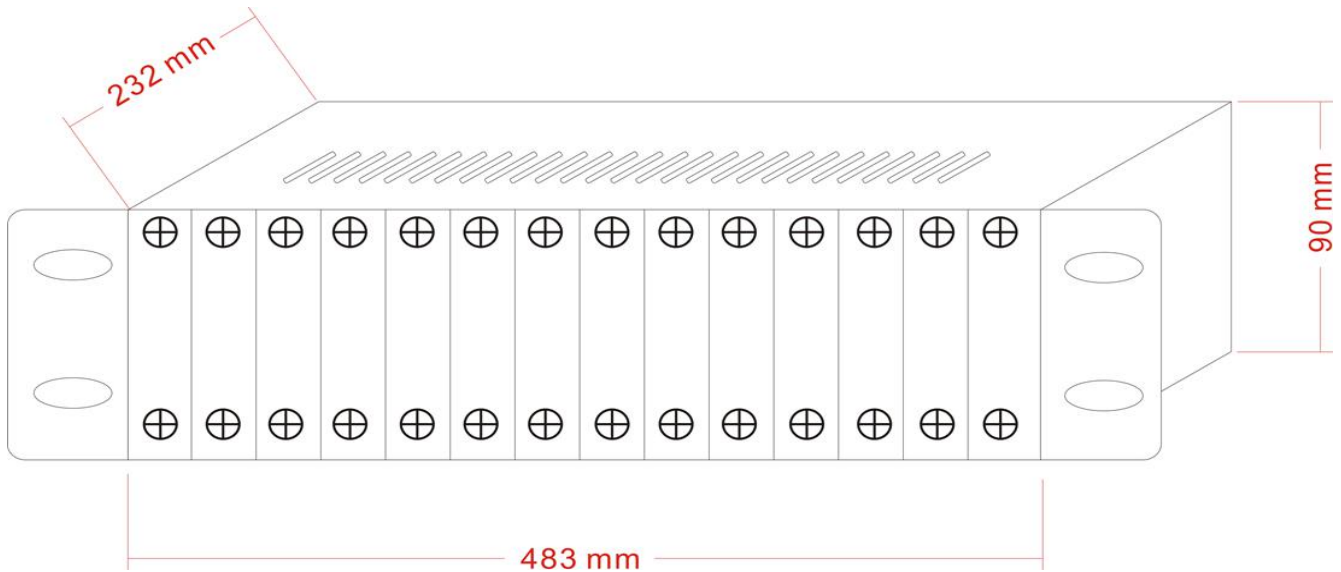


JHA-E14 is a 14-slot 19" Rack-Mount Chassis System provides housing for up to 14 JHA series media converters. Designed for continuous operation, the chassis is equipped with dual cooling fans and redundant power supplies (optional). Its Plug-and-Play and Hot-Swap features allow installing/removing the converter unit without powering off the chassis. JHA-E14 rack-mount chassis eliminates the external power adapters for JHA series media converters and organizes multiple converters in a single unit, which makes it the perfect solution for managing multiple JHA series converters.

#### Features

- Provides housing for up to 14 JHA series media converters.
- Support AC220V and DC48V two power supply, suitable for a variety of work environments.
- Each card modules are hot swappable.
- Modular power supply design, easy maintenance, better shielding, preventing the normal operation of the power generated electromagnetic signal interference module group.
- Standard chassis can be installed in the engine room rack, easy to managed.
- Simultaneously inserted 14 fiber optic transceivers, each of the transceiver module can be different of rates.
- Power protection: Overvoltage protection, overcurrent protection, short circuit protection.
- All-aluminum design, sophisticated appearance, good ventilation lightweight thermal design to ensure normal and stable operation of the system.

### Dimension



### Specification

<b>Slots Provided</b>	14 Slots
<b>Structure</b>	2 U Rack mounted
<b>Power Input</b>	AC 85~265V 50/60Hz
<b>Power Output</b>	DC 5V 1A
<b>Power Configuration</b>	Redundant Power Supply
<b>LED Indication</b>	Power
<b>Max Power Consumption</b>	95W
<b>Operating Temperature</b>	-20~70°C
<b>Working Humidity</b>	5%~90%
<b>Storage Temperature</b>	-40~70°C
<b>Storage Humidity</b>	5% to 90% Non-Condensing
<b>Dimensions</b>	483*232*90mm(L*W*H)
<b>Certification</b>	CE, FCC, RoHS
<b>Warranty</b>	3-years

### Order Information

<b>Model No.</b>	<b>Description of Goods</b>
JHA-E14-2A	14 Slots 2U Rack Mount Chassis for Standalone Media Converter, Dual Power, AC110-240V
JHA-E14-2D	14 Slots 2U Rack Mount Chassis for Standalone Media Converter, Dual Power, DC48V

## JHA-E16 Series

### 16 Slots 2U 19" Rack Mount Chassis for Card-Type Media Converter

#### Introduction

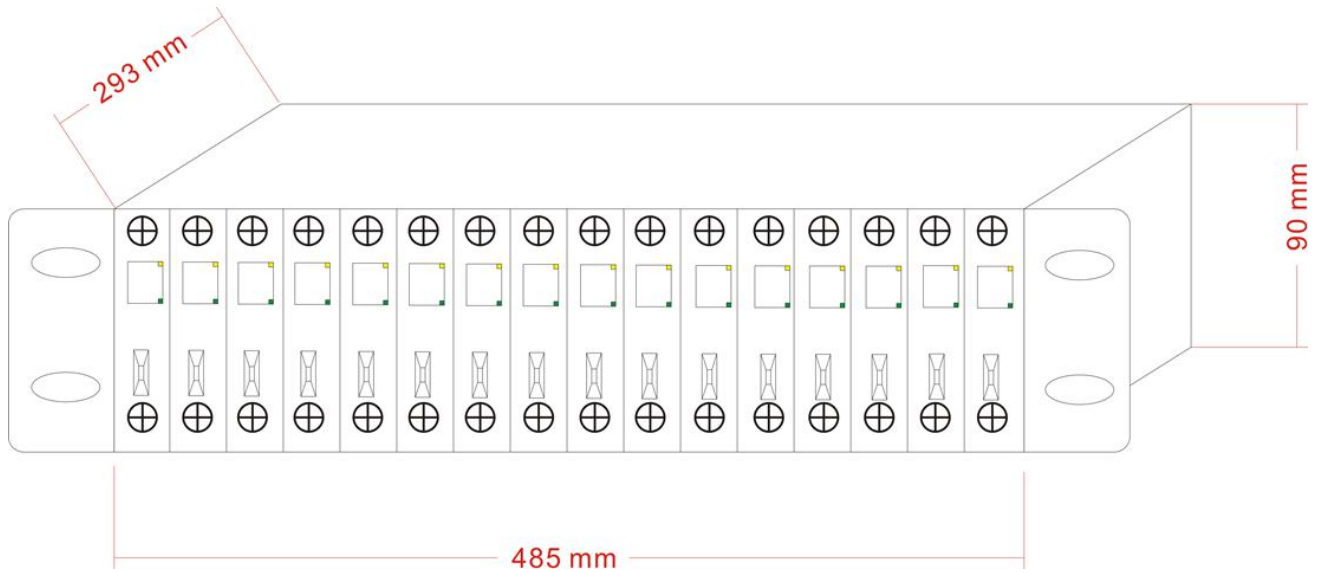


JHA-E16 is a 16-slot 19" Rack-Mount Chassis System provides housing for up to 16 JHA series media converters. Designed for continuous operation, the chassis is equipped with dual cooling fans and redundant power supplies (optional). Its Plug-and-Play and Hot-Swap features allow installing/removing the converter unit without powering off the chassis. JHA-E16 rack-mount chassis eliminates the external power adapters for JHA series media converters and organizes multiple converters in a single unit, which makes it the perfect solution for managing multiple JHA series converters.

#### Features

- Provides housing for up to 16 JHA series media converters.
- Support AC220V and DC48V two power supply, suitable for a variety of work environments.
- Each card modules are hot swappable.
- Modular power supply design, easy maintenance, better shielding, preventing the normal operation of the power generated electromagnetic signal interference module group.
- Standard chassis can be installed in the engine room rack, easy to managed.
- Simultaneously inserted 16 fiber optic transceivers, each of the transceiver module can be different of rates.
- Power protection: Overvoltage protection, overcurrent protection, short circuit protection.
- All-aluminum design, sophisticated appearance, good ventilation lightweight thermal design to ensure normal and stable operation of the system.

## Dimension



## Specification

<b>Slots Provided</b>	16 Slots
<b>Structure</b>	2 U Rack mounted
<b>Power Input</b>	AC 85~265V 50/60Hz
<b>Power Output</b>	DC 5V 16A
<b>Power Configuration</b>	Redundant Power Supply
<b>LED Indication</b>	Power
<b>Max Power Consumption</b>	95W
<b>Operating Temperature</b>	-20~70°C
<b>Working Humidity</b>	5%~90%
<b>Storage Temperature</b>	-40~70°C
<b>Storage Humidity</b>	5% to 90% Non-Condensing
<b>Dimensions</b>	485*293*90mm(L*W*H)
<b>Certification</b>	CE, FCC, RoHS
<b>Warranty</b>	3-years

## Order Information

Model No.	Description of Goods
JHA-E16-2A	16 Slots 2U Rack Mount Chassis for Card-Type Media Converter, Dual Power, AC110-240V
JHA-E16-2D	16 Slots 2U Rack Mount Chassis for Card-Type Media Converter, Dual Power, DC48V

## JHA-MF11 Series

2-port Managed Fiber Media Converter, 1-port 100Base-FX and 1-port 10/100Base-T(X)

### Introduction



JHA-MF11 series is a 10/100Base-T(X) adaptive managed fiber-optic transceiver, with a Gigabit optical port, a 10/100Base-T(X) adaptive Ethernet RJ45 port. Product design in line with Ethernet standards, add lightning protection, anti-static protection measures, -20°C-70°C wide range of operating temperature, stable and reliable performance. The network management interface of this device is simple and functional.

Support a variety of network management, including SNMP, WEB, Console and Telnet and other network management methods, can achieve the centralized network management rack. The device can be widely used in safe city, rail transportation, operator network construction and other projects.

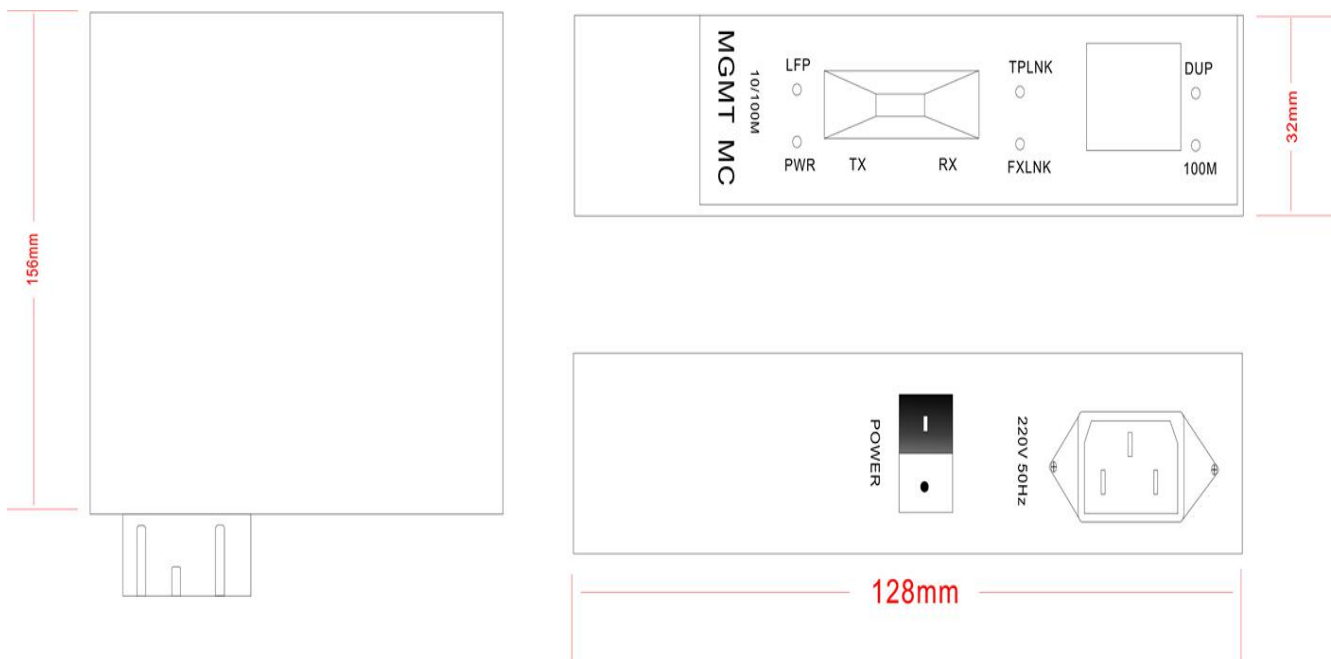
### Features

- Compliance with IEEE 802.3, IEEE 802.3U, IEEE 802.3X, IEEE 802.1Q, IEEE 802.3AB, 10Base-TX, 100Base-TX, 100Base-FX standards.
- Uses the high performance chip, realizes the non-blocking transmission exchange performance, guarantees the data transmission to have higher security and the stability.
- Support 10/100M, full/half-duplex adaptive/forced function. Auto-MDI / MDIX auto-flip.
- Support SC, FC, ST connectors (1\*9 modules) and SFP transceiver modules.
- Provide status indicators, built-in power supply (AC 110-220V / DC 48-110V).
- Support 850nm, 1310nm, 1550nm and the DWDM/CWDM wavelength specified by ITUT.
- The store-and-forward mode supports a packet size of 2K bytes and the pass-through mode

supports 9k Jumbo frames.

- Support the port bandwidth control function, the step is 32Kbps.
- Support loop-speed loopback, easy line debugging.
- Support LFP function, can quickly locate the link where the fault occurs.
- Support remote power failure alarm.
- The Inband Management feature supports both 802.3ah and TS1000.
- Powerful network management function, support WEB mode and simple network management protocol SNMP network management mode.
- Support hot-plug simple to install, the status indicator is complete, working status at a glance.
- Supports 2U racks (16 channels) and stand-alone racks. Stand-alone desktop built-in professional communications power, support dual power supply redundancy(support OLP function).

## Dimension





## Specification

<b>Protocol Standard</b>	IEEE 802.3, IEEE 802.3u, IEEE 802.3 Flow control, IEEE 802.1q VLAN, IEEE 802.1p QoS, IEEE 802.1ad Q-in Q VLAN, TS-1000
<b>Wavelength</b>	850nm/1310nm/1550nm
<b>Transmission Distance</b>	Cat5 100m Multimode, Dual-fiber 2Km Single Mode, Dual-fiber 20/40/60/80/100/120Km
<b>Ethernet Port</b>	RJ45 Ports, Connection STP / UTP Cat5/Cat5e Cooper Cable
<b>Fiber Port</b>	Multimode, Dual-fiber SC/FC/ST/LC (Diameter 50/125, 62.5 / 125µm) Single Mode, Dual-fiber SC/FC/ST/LC (diameter 9/125µm )
<b>Exchange Attribute</b>	Conversion Method: Media conversion, store and forward / straight in MAC Add: 1 K Cache: 512 Kbit Full duplex state: flow control, half-duplex: backpressure mode Store and Forward: 9.6us, Straight In: 0.9us BER: <1/1000000000
<b>LED Indicator</b>	PWR (Power Supply) FX LINK/ACT (Optical fiber port connection) LFP ( LFP function working ) TX LINK/ACT (Ethernet port connection) TX SPD ( Ethernet port speed indicate ) TX DUP (Ethernet port full duplex mode)
<b>Power Supply</b>	Power Input: AC 110-220V / DC 48-110V Full Load: <4 W
<b>Working Environment</b>	Operating Temperature: -20~70°C Storage Temperature: -40~70°C Storage Humidity: 5% to 90% non-condensing
<b>Dimension</b>	156*128*32mm ( L * W * H )
<b>Certification</b>	CE, FCC, RoHS
<b>Warranty</b>	3-years

## Order Information

Model No.	Description of Goods
JHA-MF11	10/100M Multimode, Dual Fiber, 2Km, SC/ST/FC/LC Connector
JHA-MF11-20/40/60/80/100/120	10/100M Single-mode, Dual Fiber, 20/40/60/80/100/120Km, SC/ST/FC/LC Connector
JHA-MF11W-20/40/60/80/100/120	10/100M Single-mode, Dual Fiber, 20/40/60/80/100/120Km, SC/ST/FC/LC Connector

## JHA-MG11 Series

2-port Managed Fiber Media Converter, 1-port 1000Base-FX and 1-port 10/100/1000Base-T(X)

### Introduction



JHA-MG11 series is a 10/100/1000Base-T(X) adaptive managed fiber-optic transceiver, with a Gigabit optical port, a 10/100/1000Base-T(X) adaptive Ethernet RJ45 port. Product design in line with Ethernet standards, add lightning protection, anti-static protection measures, -20°C-70°C wide range of operating temperature, stable and reliable performance. The network management interface of this device is simple and functional.

Support a variety of network management, including SNMP, WEB, Console and Telnet and other network management methods, can achieve the centralized network management rack. The device can be widely used in safe city, rail transportation, operator network construction and other projects.

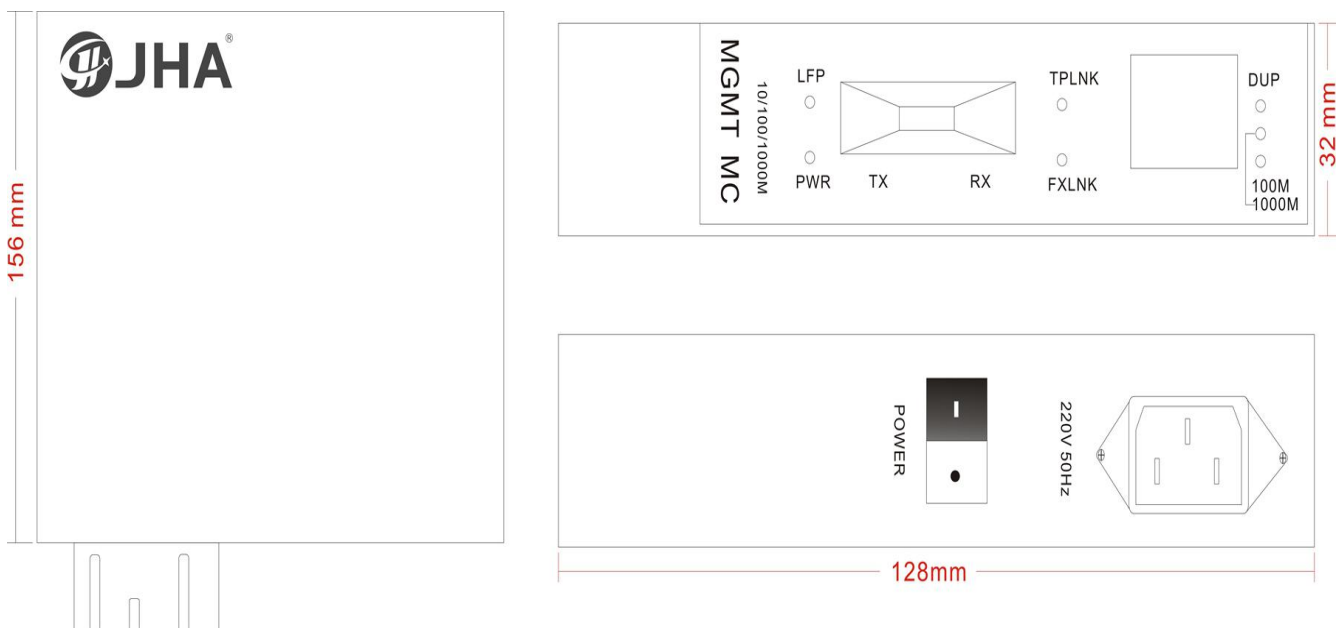
### Features

- Compliance with IEEE 802.3, IEEE 802.3U, IEEE 802.3X, IEEE 802.1Q, IEEE 802.3AB, 10Base-TX, 100Base-TX, 1000Base-TX, 1000Base-FX standards.
- Uses the high performance chip, realizes the non-blocking transmission exchange performance, guarantees the data transmission to have higher security and the stability.
- Support 10/100/1000M, full/half-duplex adaptive/forced function. Auto-MDI / MDIX auto-flip.
- Support SC, FC, ST connectors (1\*9 modules) and SFP transceiver modules.
- Provide status indicators, built-in power supply (AC 110-220V / DC 48-110V).
- Support 850nm, 1310nm, 1550nm and the DWDM/CWDM wavelength specified by ITUT.
- The store-and-forward mode supports a packet size of 2K bytes and the pass-through mode

supports 9k Jumbo frames.

- Support the port bandwidth control function, the step is 64Kbps.
- Support loop-speed loopback, easy line debugging.
- Support LFP function, can quickly locate the link where the fault occurs.
- Support remote power failure alarm.
- The Inband Management feature supports both 802.3ah and TS1000.
- Powerful network management function, support WEB mode and simple network management protocol SNMP network management mode.
- Support hot-plug simple to install, the status indicator is complete, working status at a glance.
- Supports 2U racks (16 channels) and stand-alone racks. Stand-alone desktop built-in professional communications power, support dual power supply redundancy(support OLP function).

## Dimension



## Specification

<b>Protocol Standard</b>	IEEE 802.3, IEEE 802.3u, IEEE 802.3 Flow control, IEEE 802.1q VLAN, IEEE 802.1p QoS, IEEE 802.1ad Q-in Q VLAN, TS-1000
<b>Wavelength</b>	850nm/1310nm/1550nm
<b>Transmission Distance</b>	Cat5 100m Multimode, Dual-fiber 550m Single Mode, Dual-fiber 20/40/60/80/100/120Km
<b>Ethernet Port</b>	RJ45 Ports, Connection STP / UTP Cat5/Cat5e Cooper Cable
<b>Fiber Port</b>	Multimode, Dual-fiber SC/FC/ST/LC (Diameter 50/125, 62.5 / 125 $\mu$ m) Single Mode, Dual-fiber SC/FC/ST/LC (diameter 9/125 $\mu$ m )
<b>Exchange Attribute</b>	Conversion Method: Media conversion, store and forward / straight in MAC Add: 1 K Cache: 512 Kbit Full duplex state: flow control, half-duplex: backpressure mode Store and Forward: 9.6us, Straight In: 0.9us BER: <1/1000000000
<b>LED Indicator</b>	PWR (Power Supply) FX LINK/ACT (Optical fiber port connection) LFP ( LFP function working ) TX LINK/ACT (Ethernet port connection) TX SPD ( Ethernet port speed indicate ) TX DUP (Ethernet port full duplex mode)
<b>Power Supply</b>	Power Input: AC 110-220V / DC 48-110V Full Load: <4 W
<b>Working Environment</b>	Operating Temperature: -20~70 $^{\circ}$ C Storage Temperature: -40~70 $^{\circ}$ C Storage Humidity: 5% to 90% non-condensing
<b>Dimension</b>	156*128*32mm ( L * W * H )
<b>Certification</b>	CE, FCC, RoHS
<b>Warranty</b>	3-years

## Order Information

Model No.	Description of Goods
JHA-MG11	10/100/1000M Multimode, Dual Fiber, 550m, SC/ST/FC/LC Connector
JHA-MG11-20/40/60/80/100	10/100/1000M Single-mode, Dual Fiber, 20/40/60/80/100Km, SC/ST/FC/LC Connector
JHA-MG11W-20/40/60/80/100	10/100/1000M Single-mode, Dual Fiber, 20/40/60/80/100Km, SC/ST/FC/LC Connector

## JHA-ME16 Series

16 Slots 2U 19" Managed Rack Mount Chassis for Card-Type Media Converter

### Introduction



JHA-ME16 Series is an economical, highly integrated, managed transceiver chassis for transceiver management in the room. The series of racks can be inserted into up to 16 different models of my company's fiber-optic network transceiver module card from the main and standby power supply and can automatically switch to provide a reliable power supply with automatic load balancing, that is guaranteed. Regardless of the number of fiber transceiver module access, the module provides a single slot voltage is the standard voltage to ensure the performance of fiber optic transceiver module reliability and stability to ensure the consistency of the life cycle.

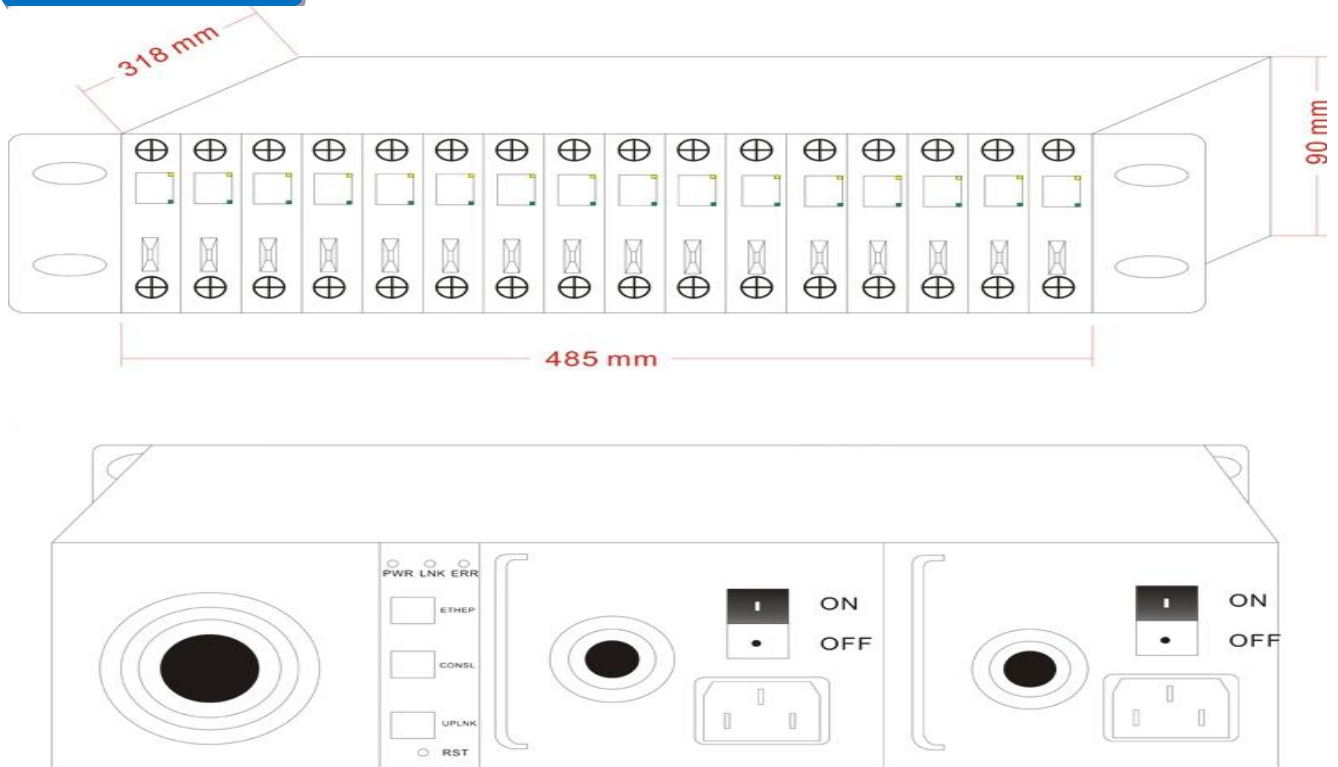
### Features

- GUI-based network management, software operation is simple, user-friendly, you can set different levels of users.
- Centralized management, combined with tree-type directory, in a software interface while managing multiple rack devices.
- The introduction of group management, even if the management of multiple devices, but also can easily operate on any one device.
- Provide master-slave management module, you can cascade 3 sub-rack management 128 optical interface, management module failure does not affect the normal work of other modules.
- Supports graphical and command management based on SNMP, Web, Telnet, and Console.
- Console management interface: Users can use Windows HyperTerminal, through the serial port for

network configuration and set user permissions.

- **Web management:** remote access via a web browser, network configuration and set permissions, can display / control the working status of the remote transceiver.
- **SNMP protocol:** provide MIB library, integrated SNMP network management software, you can set up to four TRAP address, according to user needs to select TRAP trigger conditions.
- **The network management system supports automatic discovery and addition of network devices.**
- **You can display and configure system information such as rack name, location information, IP address information, and hardware and software version number.**
- **Detailed power supply, transceiver and repeater working status can be inquired, display chassis temperature information, fault report in real time.**
- **Support SFP / XFP, CWDM SFP / XFP, DWDM SFP / XFP and display SFP / XFP information and digital diagnostic functions.**
- **Support remote power-down detection, can be sent through the remote error message to detect the sending fiber connection status.**
- **Support failover (LFP) function, can quickly locate the fault occurred link, to facilitate the maintenance staff.**
- **Support remote reboot, through the network management software to set the system restart or a single module restart.**
- **Transceiver board can be restored to factory settings configuration or DIP switch configuration, power-down configuration information is automatically saved.**
- **You can query and configure the working mode of the local and remote device ports, including connection status, connection rate, port shutdown, LFP, and so on.**
- **Loopback and PRBS packet handlers are supported for link performance diagnosis and evaluation.**
- **Support in-band network management, can facilitate the management of remote devices.**
- **With a powerful historical alarm and log information query and management functions.**
- **Support FTP (file transfer) protocol, you can easily achieve online software upgrades.**
- **Support different types of business cards with the platform management, the original platform through FTP upgrade, compatible with the new card.**

## Dimension



## Specification

<b>Faceplate</b>	16 network management card slot +1 network management board slot
<b>Bandwidth</b>	155Mbps, 1.25Gbps, 4.25Gbps, 10Gbps
<b>Protection Grade</b>	IP30
<b>MTBF</b>	≥30,000 hours
<b>Protocol Standard</b>	IEEE802.3: CSMA/CD, IEEE802.3i: 10Base-T, IEEE802.3i: 100Base-T
<b>EMI</b>	Electromagnetic Interference Test
<b>EMC</b>	IEC61000-4-2(ESD) ±8kV(contact) ±15(air) IEC61000-4-3(RS) 10V/m(80MHz~2GHz) IEC61000-4-4(EFT) Power Port: 4kV, Data Port: ±2kV IEC61000-4-5(Surge) Power Port: ±2kV/DM, ±4kV/CM, Data Port: ±2kV IEC61000-4-6(CS) 3V(10kHz~150kHz), 10V(150kHz~80MHz) IEC61000-4-16 (Common Mode Conduction) 30V (Cont), 300V (1S)
<b>Power Supply</b>	Dual Power Redundancy Input Voltage: AC / DC 85V ~ 265V Maximum Power Consumption: 55W
<b>Working Environment</b>	Working Temperature: -20 ~ 70 °C Operating Humidity: 5% to 90% Storage Temperature: -40 ~ 70 °C Storage Humidity: 5% to 90% non-condensing

<b>Installation</b>	2U Rack Mount
<b>Dimension</b>	Chassis: 485 * 318 * 90mm Module Card: 115 * 88 * 26mm

### Order Information

<b>Model No.</b>	<b>Description of Goods</b>
JHA-ME16-2A	16-slot AC 220V, Dual Power Managed Rack Mount Chassis
JHA-ME16-2D	16-slot DC 48V, Dual Power Managed Rack Mount Chassis
JHA-ME16-A/D	16-slot DC 48V / AC 220V, Dual Power Managed Rack Mount Chassis