WoMaster
Quick Installation Guide

Industrial 1-port Fast Ethernet to Fiber Media Converter
DS101

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· Overview

The DS101 industrial media converter provides industrial-grade media conversion between 10/100BaseT(X) and 100BaseFX (SC/ST connectors). The DS101 converters' reliable industrial design is excellent for keeping your industrial automation applications running continuously even under extreme operating temperature from -40 to 75°C. All DS101 converters are subjected to a 100% burn-in test.

Model Name	Description
DS101-M-SC-2	Industrial 1-port Fast Ethernet to Fiber Media Converter, multi-mode, 2km/1310nm, SC
DS101-M-ST-2	Industrial 1-port Fast Ethernet to Fiber Media Converter, multi-mode, 2km/1310nm, ST
DS101-S-SC-30	Industrial 1-port Fast Ethernet to Fiber Media Converter, single-mode, 30km/1310nm, SC
DS101-S-ST-30	Industrial 1-port Fast Ethernet to Fiber Media Converter, single-mode, 30km/1310nm, ST

· Package Checklist

✓ 1 x Product Unit
✓ 1 x 3-pin Removable Terminal Connector
✓ 1 x Attached Din Clip
✓ 1 x Quick Installation Guide

Optional Accessory (for detailed information please refer to the Datasheet)

· Installation

DIN Rail mount
To mount the switch on the DIN Rail track, insert the upper end of the DIN-Rail clip into the back of the DIN-Rail track from its upper side and lightly push the bottom of the DIN-Rail clip into the track. The DIN Rail should comply with DIN EN50022 standard. Using wrong DIN rail may cause unsafe installation.

← DIN Rail Clip

Grounding Screw
For avoiding system damage by noise or electric shock, establish a direct connection by insert the grounding wire into the GND contact on the terminal block connector, then tighten the wire-clamp screws. It is located at the bottom of the switch.


Grounding Screw
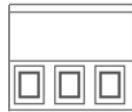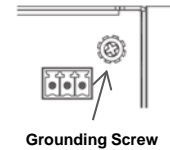
Wiring the Power Input

V1+   V-   V2+

1) Insert the positive and negative wires into the V1+, V- and V2+ contact on the terminal block connector. (V- is the negative voltage shared by the two power supplies)
2) Tighten the wire-clamp screws.
3) Connect the power wires to suitable DC Switching type power supply. The input DC voltage should be in the range of 9VDC to 60VDC.

DIP Switch Setting
In addition, the DS101 converter also has a DIP switch to configure the converter or store and forwarding mode, RJ45 at 100Mbps half-duplex or auto-negotiation, enable or disable link loss forwarding. The table below shows how to assign the DIP switch dial to the corresponding function. The table below shows how the DIP-switch pin number is assigned to the function.

TP Forced 100 Half
Fast Con.   LLF En
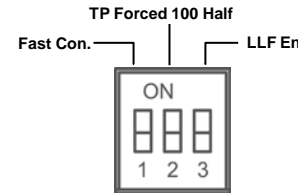
DIP	Fast Con.	TP Forced 100 Half	LLF En
ON	[ON] Set to Converter Mode	[ON] Set RJ45 in 100Mbps Half Duplex Mode	[ON] Enable LLF
OFF	[1] Set to Store and Forwarding Mode	[2] Set RJ45 in 100Mbps Auto Negotiation Mode	[3] Disable LLF

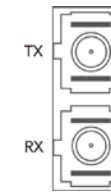***Note : Please reboot the device, after you change the DIP Switch Setting.**

Fiber Ports (SC/ST)
DS101 is equipped with fiber ports. To connect the fiber port, remember to link the Tx (transmit) port to the Rx (receive) port of the receiving device, and the Rx (receive) port to the Tx (transmit) port of transmitting device.
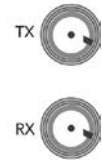***Warning: Be careful when connecting the fiber port, the wrong connection will cause the fiber port not working properly.***
The picture below shows the fiber ports SC and ST appearance.

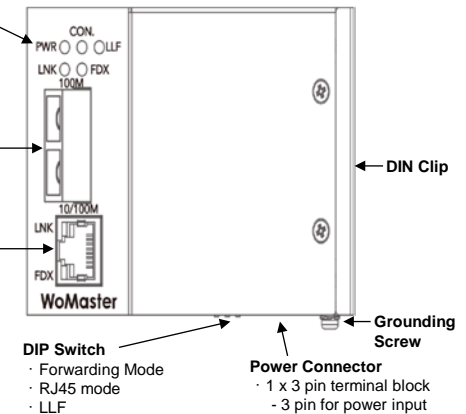**Duplex SC type Fiber port**   **Duplex ST type Fiber port**

· Appearance

DS101-M/S-SC/ST

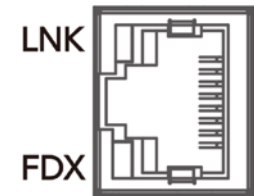**System LED**
· 1x Power
· 1x Mode
· 1x LLF
· 2x FX
  - 1x LNK
  - 1x FDX

1-port 100Base-FX (SC/ST model)

1-port 10/100Base-TX

← DIN Clip

DIP Switch
· Forwarding Mode
· RJ45 mode
· LLF

Grounding Screw

Power Connector
· 1 x 3 pin terminal block
- 3 pin for power input

LED Indicator
DS101-M/S-SC/ST
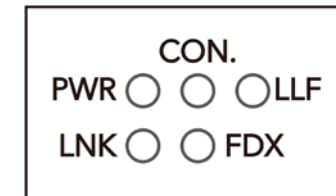
LED	Status	Description
PWR	Green On	DC-IN Power is On
	Off	No Power in DC-IN
CON.	Green On	Converter Mode
	Off	Store and Forward Mode
LLF	Red On	LLF Event Occurs
	Off	No LLF Event Occurs

LED	Status	Description
LNK (Fiber Port)	Green On	Links established
	Green Blinking	Packets transmitting/receiving
	Green Off	Link is inactive
FDX (Fiber Port)	Amber On	Full Duplex
	Amber Blinking	Half Duplex & Collision
LNK (Ethernet Port)	Green On	Links established
	Green Blinking	Packets transmitting/receiving
	Green Off	Link is inactive
FDX (Ethernet Port)	Amber On	100Mbps Full Duplex
	Amber Blinking	100Mbps Half Duplex & Collision

· Safety Precautions

➢ Turn off DC power input source before connecting the DC Power supply module to the terminal block connectors. Do not turn-on the source of DC power module and make sure all connections were well established, then power on the DC source to powering the Switch device.
➢ Never install or work on/with the equipment or the cabling during the period of lightning activity.
➢ The DIN Rail should comply with DIN EN50022 standard. Using wrong DIN rail may cause unsafe installation.

· Support

At WoMaster, you can use the online service forms to **request the support**. The submitted forms are stored in server for WoMaster team member to assign tasks and monitor the status of your service. Please feel free to write to **help@womaster.eu** if you encounter any problems.

· Warranty

5-year Global warranties are available for WoMaster products assuring our customers that the products shall remain free from defects in workmanship or materials and conform in all material respects to WoMaster specifications, or Purchaser's supplied and accepted specifications. The warranty is limited to the repair and/or replacement, at WoMaster' sole discretion, of the defective product during its warranty period. The customer must obtain a **Return Merchandise Authorization (RMA)** approval code prior to returning the defective Product to WoMaster for service. The customer agrees to prepay shipping charges, to use the original shipping container or equivalent, and to insure the Product or assume the risk of loss or damage in transit. Repaired or replaced products are warranted for ninety (90) days from the date of repair or replacement, or for the remainder of the original product's warranty period, whichever is longer.

· Disclaimer

WoMaster reserves the right to make changes to this QIG or to the product hardware at any time without notice. It is the user's responsibility to determine whether there have been any such updates or amendments herein.
Defects, malfunctions, or failures of the warranted Product(s) caused by damage resulting from unforeseeable incidents (such as lightings, floods, fire, etc.), environmental and atmospheric disturbances, other external forces such as power line disturbances and surge, host computer malfunction and virus, incorrect power input, or incorrect cabling, incorrect grounding and damages caused by misuse, abuse and unauthorized alteration or repair are not warranted.

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