

Ultra Compact Unmanaged Switch for Automation

DS105 series

Industrial 5-port Unmanaged Ethernet Switch

DS105 is a cost effective industrial 5-port Ethernet switch for industrial Ethernet connection. The rugged design can stand for harsh environment and wide temperature (from -40 to 75°C) use. Ultra low power design consumes less than 1W during full traffic. The compact size can fit in for space limited installation such as vehicle wall-mounting or Din-mount for cabinets. Micro USB DC 5V power input is flexible for installation.



Features & Benefits

Ethernet Network Switching

- 5-port 10/100BaseTX Ethernet with auto Negotiation, auto MDI/MDIX
- Stores and forwards with non-blocking switch fabric

IEEE 802.3az EEE Power Management

- Ultra low power design, less than 1W when full loading
- Energy Efficient Ethernet for low power requirement
- Idle power saving mode for energy efficiency

Broadcast Storm Protection & QoS

- Auto drop excessive incoming broadcast packets for network availability protection
- Port-based QoS port for Ethernet Port 4/5

Versatile Power Input and Mounting

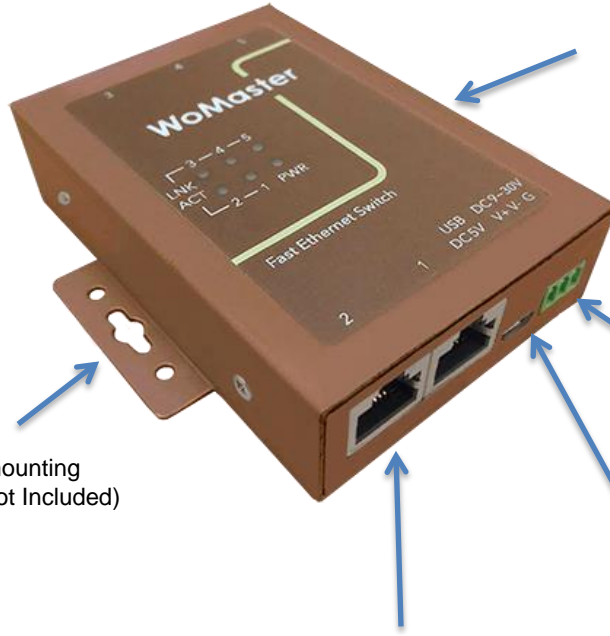
- 5~30VDC wide range power input
- Micro USB connector for USB DC 5V power input
- Redundant power design: 5~30V/USB 5V
- Support Wall-mount and Din-mount

Rugged Mechanical Design

- Ultra compact mechanical design
- Wide operating temperature range **-40 ~ 75°C**
- CE marking
- IEC61000-6-2/IEC61000-6-4 heavy industrial EMC



Interfaces



Wall Mount Clip

- Also used for DIN rail mounting with bracket (Bracket not Included)

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Integrated Power Connector

- 3-Pin Removable Terminal Connector
- 2 Pin for Power Input (V+, V-)
- 1 Pin for Ground

USB 5V Power Input

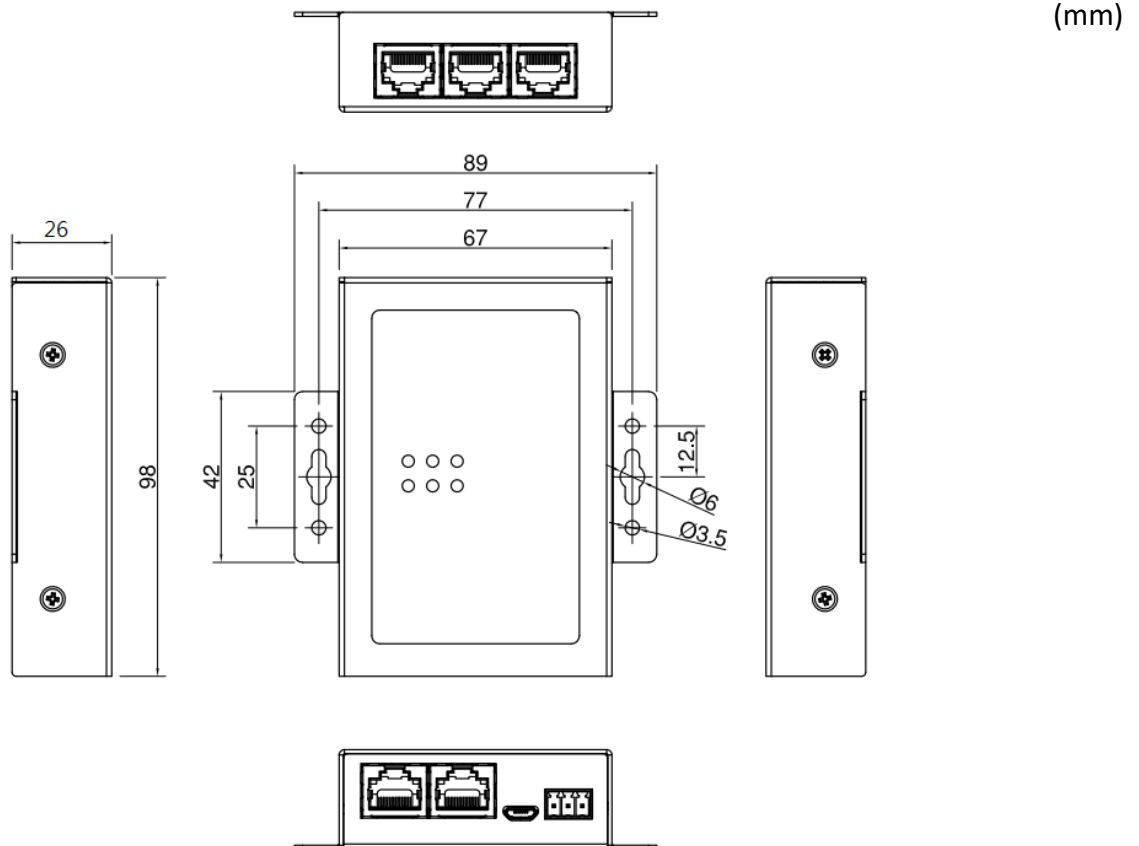
- MicroUSB Connector

Ethernet Network

- 5-port 10/100MBase-TX
- (3-port on top, 2-port on bottom)



Dimensions



Technology	
Standard	IEEE 802.3 10Base-T Ethernet
	IEEE 802.3u 100Base-TX Fast Ethernet
	IEEE 802.3az Energy Efficient Ethernet
Performance	
Switch Technology	Store and Forward Technology with Non-Blocking Switch Fabric
Number of MAC Address	1K
Packet Buffer Memory	448K bits
Broadcast Storm Protection	Supported
QoS	Port Based QoS on Ethernet Port 4/5
Transfer performance	10Base-T: 14,880pps, 100Base-TX: 148,800pps
Interface	
Ethernet Port	5 x 10/100Base-TX RJ45, Auto Negotiation, Auto MDI/MDIX
System LED	1 x Power: Green On 5 x Ethernet Port: Link (Green On), Activity (Green Blinking)
Power input	MicroUSB for DC 5V or 3-Pin Removable Terminal Connector 2 Pin for Power Input (V+, V-) 1 Pin for Ground
Power Requirement	
Input Voltage	24VDC(5~30 VDC) in Terminal Block or 5 VDC in MicroUSB Redundant power: 5~30V/USB 5V
Reverse Polarity Protect	Yes
Input Current	0.034A@24V
Power Consumption	Max. 0.81W@24V full traffic, suggest to reserve 15% tolerance
Mechanical	
Installation	Wall mount/DIN Rail
Enclosure Material	Steel Metal
Dimension	98 (D) x 89 (H) x 26mm (W) / with wall mounting clip 98 (D) x 67 (H) x 26mm (W) / without wall mounting clip
Ingress Protection	IP40
Weight	220g without package
Environmental	
Operating Temperature & Humidity	-40°C~75°C , 0%~95% Non-Condensing
Storage Temperature	-40°C~80°C
MTBF	>200,000 hours
Warranty	5 years
Standard	
EMC	EN61000-6-2/EN61000-6-4
EMI	CISPR 22, FCC part 15B Class A
EMS	EN61000-4-2 ESD, EN61000-4-3 RS, EN61000-4-4 EFT, EN61000-4-5, EN61000-4-6 CS, EN61000-4-8 Magnetic Field


Ordering Information

Model Name	Description
DS105	Industrial 5-port Unmanaged Ethernet Switch
	Package List
	1 x Product Unit
	1 x Attached 3-pin Removable Terminal Block Connector
	1 x Quick Installation Guide