

DIGITUS®

L2 Managed Switch (PoE)



Quick Installation Guide

DN-651154, DN-651155

DN-651156, DN-651157

DN-651158, DN-651159

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1. Overview

This series are (PoE) Ethernet switches with 4 / 8 / 16 port Gigabit Ethernet + 2 port 1000Mbps SFP (PoE version available) with console port. The Ethernet switch uses the Layer 2 protocol, which is required in the industry to ensure the stability of the communication network. The switches in this series have low power consumption and a fanless design, so there is no noise. They support a wide operating temperature range of -40~80°C and offer good electromagnetic compatibility (EMC) to ensure stable operation in harsh industrial environments and quickly cater to industrial applications such as factory automation, intelligent transportation and video surveillance. A stable network terminal provides a secure and reliable solution.

2. Features

- Data control: support 802.3X full-duplex flow control, support network storm suppression
- Redundant network: support STP/RSTP/MSTP, support ERPS (self-healing time <20ms)
- Multicast management: support IGMP Snooping V1/V2/V3
- VLAN: Support IEEE 802.1Q VLAN, effectively isolate the broadcast domain
- Link aggregation: support link static/dynamic aggregation, providing perfect bandwidth utilization
- QOS: Support COS\DSCP, 4 queues, support WRR\SP scheduling mode
- Security management: support ACL access control list, support 802.1X
- Management function: support WEB, CLI, SNMP management methods
- Monitoring and maintenance: support port mirroring, interface status monitoring, log management
- IP40 protection grade

3. Specification

3.1 standard

IEEE802.3i-10BaseT, IEEE802.3u-100BaseTX/100Base-FX, IEEE802.3x-Flow Control, IEEE802.3af, IEEE802.3at IEEE802.3z-1000BaseLX, IEEE802.3ab-1000BaseTX, IEEE802.1ab, IEEE802.1D-Spanning Tree Protocol, IEEE802.1w-Rapid Spanning Tree Protocol, IEEE802.1Q -VLAN Tagging, IEEE802.1p -Class of Service, IEEE802.1X-Port Based Network Access Control etc.

3.2 Interface

DN-651154 / DN-651155 (PoE)

4 Port Gigabit RJ45+2 Port Gigabit SFP

DN-651156 / DN-651157 (PoE)

8 Port Gigabit RJ45+2 Port Gigabit SFP
DN-651158 / DN-651159 (PoE)
16 Port Gigabit RJ45+2 Port Gigabit SFP

3.3 Work environment

Work environment: -40~80 °C
storage temperature: -40~85 °C
relative humidity: 5%~95% (no condensation)

3.4 Power supply

input voltage: DC12-48V
Input voltage: DC48-57V (PoE Version)
(Two-way power redundancy backup)
Access terminal: Terminal block
Support dual power redundancy
Support reverse connection protection

3.5 Mechanical characteristic

IP40 aluminum housing
DIN rail installation
Natural colling / No fan.

3.7 Industrial standard

FCC CFR47 Part 15, EN55032, Class A
IEC61000-4-2 (ESD): ±8kV (contact), ±12kV (air)
IEC61000-4-3 (RS): 10V/m (80~1000MHz)
IEC61000-4-4 (EFT): Power Port: ±2kV; Data Port: ±1kV
IEC61000-4-5 (Surge): Power Port: ±2kV/CM, ±1kV/DC;
Data Port: ±4kV/CM, ±2kV/DM
IEC61000-4-6 (CS): 3V (10kHz-150kHz); 10V (150kHz-80MHz)
IEC61000-4-16 (Common mode conduction): 30V (cont.), 300V (1s)
Frequency range: 150kHz-80MHz
Impact: IEC 60068-2-27; Free Fall: IEC 60068-2-32
Vibration: IEC 60068-2-6

3.8 Spec table

Model No	DN-651154	DN-651155
Network port	4 x 1000Mbps	
SFP slot	2 x 1000Mbps	
PoE Spec.	NA	IEEE802.3af IEEE802.3at
Power Pin Assignment	NA	1/2+;3/6-
Bandwidth	20 Gbps	
Packet Buffer Memory	4.1 Mbit	
Forwarding rate	15 Mpps	
Mac address table	4 K	
Max. Frame Size	10240 bytes	
Power consumption	< 5 watts	
ESD protection	contact 8KV, air 12KV	
Surge protection	CM±4KV, DM±2KV	
Enclosure	IP40	
Power Supply	DC12-48V	DC48-57V
MTBF	300,000 hours	
Working Temp.	-40 to 80C	
Dimension (mm)	143.7*104*47.7	
Weight (kg)	0.7	

Model No	DN-651156	DN-651157
Network port	8 x 1000Mbps	
SFP slot	2 x 1000Mbps	
PoE Spec.	NA	IEEE802.3af IEEE802.3at
Power Pin Assignment	NA	1/2+;3/6-
Bandwidth	20 Gbps	
Packet Buffer Memory	4.1 Mbit	
Forwarding rate	15 Mpps	
Mac address table	4 K	
Max. Frame Size	10240 bytes	
Power consumption	< 10 watts	
ESD protection	contact 8KV, air 12KV	
Surge protection	CM±4KV, DM±2KV	
Enclosure	IP40	
Power Supply	DC12-48V	DC48-57V
MTBF	300,000 hours	
Working Temp.	-40 to 80C	
Dimension (mm)	143.7*125*47.7	
Weight (kg)	0.7	

Model No	DN-651158	DN-651159
Network port	16 x 1000Mbps	
SFP slot	2 x 1000Mbps	
PoE Spec.	NA	IEEE802.3af IEEE802.3at
Power Pin Assignment	NA	1/2+;3/6-
Bandwidth	56 Gbps	
Packet Buffer Memory	4.1 Mbit	
Forwarding rate	42 Mpps	
Mac address table	8 K	
Max. Frame Size	10240 bytes	
Power consumption	< 15 watts	
ESD protection	contact 8KV, air 12KV	
Surge protection	CM±4KV, DM±2KV	
Enclosure	IP40	
Power Supply	DC12-48V	DC48-57V
MTBF	300,000 hours	
Working Temp.	-40 to 80C	
Dimension (mm)	175.6*135*45.5	
Weight (kg)	1.2	

4. Package

- Industrial switch 1pcs
- User manual 1pcs
- Terminal block 1pcs

5. Switch Panel

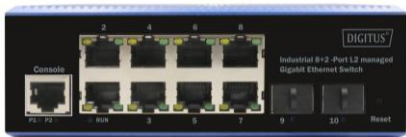


Side panel: P1 and P2 are the number of connecting terminals, P+1 and P-1 are respectively to the positive and negative poles to be connected; Earthing screw used for earthing equipment.

DN-651154 / DN-651155 4+2 port



DN-651156 / DN-651157 8+2 port



DN-651158 / DN-651159 16+2port



Front panel: the yellow light on RJ45 port is the link light, it is on when the connection is established, and the transmission data is flashing; the green light on RJ45 port is the POE light, which is only on when the switch port supplies power to the downlink PD; green LED on is for system operation. the power indicator “POW” shows Whether the current device is received power in normal. The green LED for optical link

Switch size(mm)

DN-651154/DN-651155 4port: 143.7*104*47.7mm

DN-651156/DN-651157 8port: 143.7*125*47.7mm

DN-651158 / DN-651159 16port: 175.6*135*45.5mm

6. LED Indicator

LED Indicator	Status	Definition
Power	LED on	Power work in normal
	LED off	No power or power in trouble
RJ45 LED	Yellow LED on	Ethernet work in normal
	Yellow LED flashing	Link communication in normal
	Green LED on	PoE feeding to PD device in normal
	Green LED off	No PoE work
RUN	Green LED slowing flashing	System run in normal
Optical LED	Green LED on	Optical work in normal

7. Installation Caution

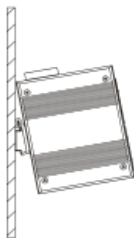
7.1 Installation precautions

In order to avoid damage to equipment and personal injury caused by improper use, please follow the following precautions:

- In order to avoid damage caused by falling of the equipment, please put the equipment in a stable environment.
- When supplying power to the equipment, pay attention to confirm the range of power supply voltage, as well as the positive and negative poles of the power supply, so as not to damage the equipment by wrong operation.
- In order to reduce the risk of electric shock, ensure that the equipment is well grounded in the working environment.
- No matter when, please do not arbitrarily remove the equipment shell.
- When placing the switch, please avoid the area with dust and strong electromagnetic interference

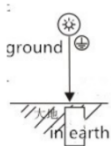
7.2 Din rail installation

The first step is to check the grounding and stability of the guide rail: the guide rail slot of the switch is clamped into the guide rail; The second step: from the center to both sides of the guide rail positioning screws in order. Step 3: Use screws to fix the mounting rail card slot on the fixed guide groove at both ends of the guide rail to ensure that the guide rail and the switch are fixed on the guide rail vertically and stably.



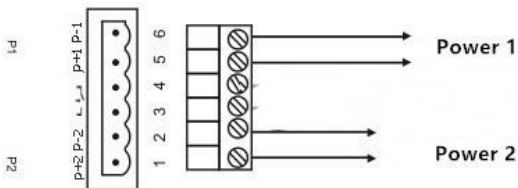
7.3 grounding

Fix the grounding wire to the grounding screw above the switch, and ensure good reliable connection of the grounding system.



7.4 Power Connection

Insert the power cord into the specified position of the 6-core terminal, and insert the terminal into the standard power supply inlet (P+1 and P-1 input corresponding to the first power supply P1, and P+2 and P-2 input corresponding to the second power supply P2). The available voltage standard of the power supply is supported from 48V DC to 57V DC



8. Management system Login

This series of Managed ethernet switches provides a serial port-based management system program debugging port. Located at the front of panel to log in to the command line via a standard line.



Console port: baud rate 115200

Web IP: 192.168.10.12

User name: admin Password: admin

For detail Web User Instruction, which is available on www.assmann.com

This is a Class A product. In home environment, this product may cause radio interference. In this case, the user may be required to take appropriate measures.

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