Quick Installation Guide

MS656100

Industrial Unmanaged Switch
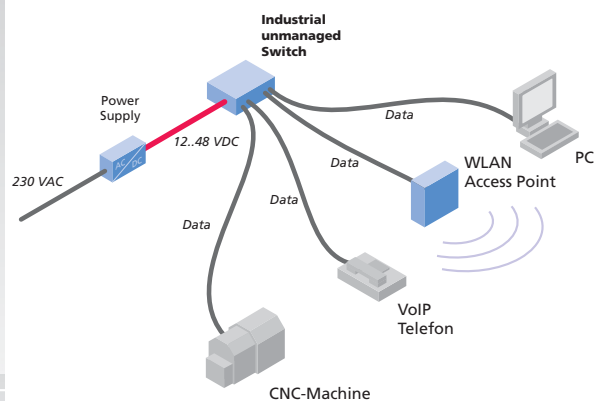
Introduction

MS656100 is an unmanaged Ethernet switch with 5x10/100Base-TX ports. With very compact size of housing, you can install **MS656100** easily.   In addition, **MS656100** with rigid IP-30 housing design can operate under harsh environments. The extended operating temperature range from -40℃ to 70℃ makes it satisfying for most requirements of operation.

Features

▷ **Supports 5 ports 10/100Base-TX**
▷ **Supports auto-negotiation and auto-MDI/MDI-X**
▷ **Supports store and forward transmission**
▷ **Supports flow control**
▷ **Compact size for easy installation**
▷ **Rigid IP-30 housing design**
▷ **DIN-Rail and wall mounting enabled**

Practical Operation
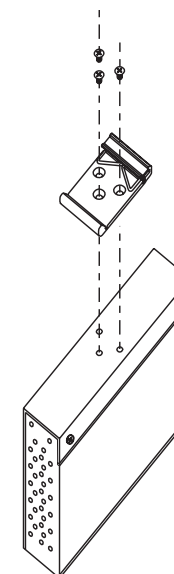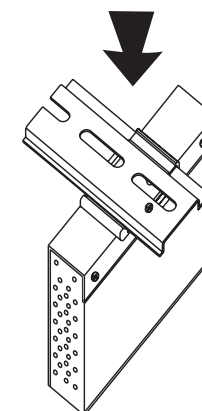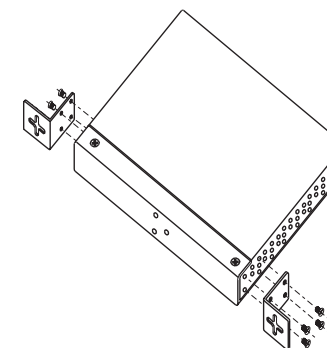
◉ **Connections of Ethernet devices**

Industrial unmanaged Switch

Power Supply

12..48 VDC

230 VAC

Data

Data

Data

Data

Data

PC

WLAN Access Point

VoIP Telefon

CNC-Machine

Specifications

Microsens P/N	MS656100
Physical Ports	
10/100 Base-TX Ports in RJ-45 Auto MDI/MDIX	**5**
Technology	
Ethernet Standards	IEEE 802.3 for 10Base-T IEEE 802.3u for 100Base-TX and 100Base-FX IEEE 802.3x for Flow control
Processing	Store-and-Forward
LED Indicators	
Power indicator	Green: Power LED x2
10/100TX RJ-45 Port Indicator	Green for port Link/Act. Amber for duplex indicator
Power	
Input power	Dual 12..48 VDC power inputs at 4-pin terminal block
Power consumption(Typ.)	3 Watts
Overload current protection	Present
Reverse polarity protection	Present on terminal block
Physical Characteristic	
Enclosure	IP-30
Dimension (W x D x H)	26.1(W) x 70(D) x 95(H)mm (1.03x 2.76 x 3.74inch.)
Weight (g)	205 g
Environmental	
Storage Temperature	-40 to 85℃ (-40 to 185℉)
Operating Temperature	-40 to 70℃ (-40 to 158℉)
Operating Humidity	5% to 95% Non-condensing
Regulatory Approvals	
EMI	CISPR (EN55022) class A
EMS	EN61000-4-2 (ESD), EN61000-4-3 (RS), EN61000-4-4 (EFT), EN61000-4-5 (Surge), EN61000-4-6 (CS), EN61000-4-8, EN61000-4-11
Shock	IEC60068-2-27
Free Fall	IEC60068-2-32
Vibration	IEC60068-2-6
Safety	EN60950-1
Warranty	5 years

Installation

◉ **Din-Rail Install Step**   ◉ **Wall-mounted Install Step**

MICROSENS

Quick **I**nstallation **G**uide

MS656100   Industrial Unmanaged Switch

Front Panel

Power LED

MICROSENS

PWR1 PWR2

5

4

3

2

LNK/ACT LED
(Green)

10/100 LAN Port

1

Full Duplex Indicator
(Amber)

ETH 10/100M

Power Connection Guide

PWR2 PWR1

G

V2+ V2- V1+ V1- DC12-48V

Frame Ground

Power
Supply
12-48 VDC

V+
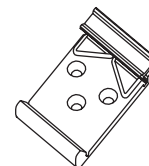V-

V+ V-
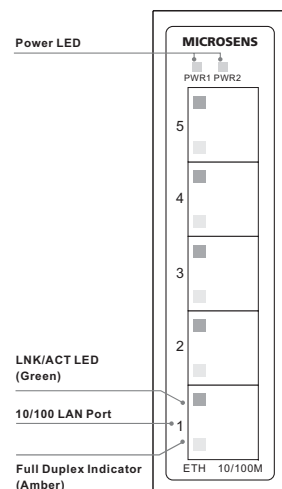
Power
Supply
12-48 VDC
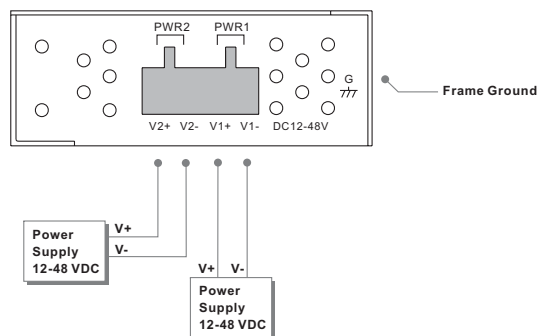
Accessory

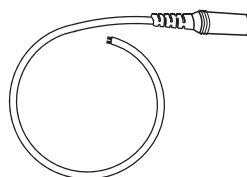① 4-Pin Terminal block   ② Dust Cover (RJ-45)   ③ Screw (M3 X3)

④ Wall-mounted kit   ⑤ 25mm DIN-Rail kit
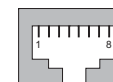
⑥ Power Cable with power jack   ⑦ QIG
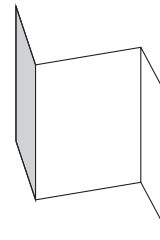
Packing list

Model name	Model Description	Accessory
MS656100	Industrial Fast Ethernet Switch, 5x 10/100Base-TX, -40..+70°C	①X 1, ②X 5, ③X 8, ④X 2, ⑤X 1, ⑥X 1, ⑦X 1

Communication Connections

⚬ **10/100Base-TX Ethernet Port Connection**

■ **RJ-45 (8-pin, MDI) Port Pinouts**

Pin	Single
1	Tx+
2	Tx-
3	Rx+
6	Rx-

1   8

■ **RJ-45 (8-pin, MDI-X) Port Pinouts**

Pin	Single
1	Rx+
2	Rx-
3	Tx+
6	Tx-

1   8
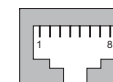
■ **RJ-45 (8-pin) to RJ-45 (8-Pin) Straight-Through Cable Wiring**

Switch Port   Straight-Through Cable   NIC Port

RJ-45
Connector   RJ-45 Plug Pin1   RJ-45
Connector

Tx+	3	——	3	Rx+
Tx-	6	——	6	Rx-
Rx+	1	——	1	Tx+
Rx-	2	——	2	Tx-
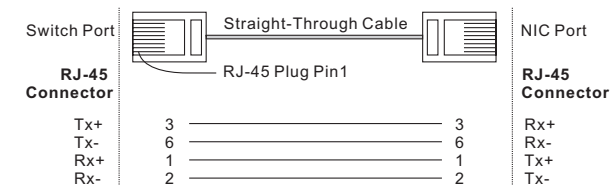
■ **RJ-45 (8-pin) to RJ-45 (8-Pin) Cross-Over Cable Wiring**

Switch Port
(NIC Port)   Cross-Over Cable   Switch Port
(NIC Port)

RJ-45
Connector   RJ-45 Plug Pin1   RJ-45
Connector

(Rx+)	Tx+	3	——	1	Rx+	(Tx+)
(Rx-)	Tx-	6	——	2	Rx-	(Tx-)
(Tx+)	Rx+	1	——	3	Tx+	(Rx+)
(Tx-)	Rx-	2	——	6	Tx-	(Rx-)
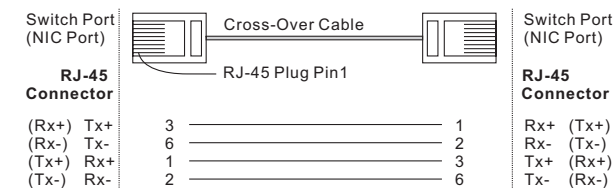
Note: This is a class A industrial device, it may cause radio interference in living areas