NSM-316G User's Manual

16-PORT GBE Ethernet Unmanaged Switch



The NSM-316G is 16-port unmanaged full Gigabit Ethernet switch, Energy Efficient Ethernet™ (EEE) , Port's loss link Break Alarm, Power loss Alarm.

Features:

- Full Gigabit Ethernet ports
- Nonblocking architecture, line rate for all packet sizes
- Fully integrated packet buffer
- DIP switch alarm setting for Port's break
- Power loss alarm
- Supports 9216 Byte jumbo frames
- Supports Auto Negotiation and Auto MDI/MDI-X
- Supports Dual +12 ~ 48 VDC power input and 1 relay output
- Supports operating temperatures from – 40 ~ +75°C
- DIN-Rail, Wall Mounting (optional)

Specifications:

Technology	
Standards	IEEE 802.3 for 10Base-T IEEE 802.3u for 100Base-TX IEEE 802.3ab for 1000Base-T IEEE 802.3x for Flow Control Energy Efficient Ethernet (EEE) as per 802.3az; this provides power savings during idle network activity
Processing Type	Store & forward, wire speed switching
MAC Addresses	8K
Packet buffer memory	512KByte
Jumbo Frames	9216 Byte
Flow Control	IEEE802.3x flow control, back pressure flow control

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Interface	
RJ-45 Ports	10/100/1000 BaseT(X), 10/100BaseT(X) auto negotiation speed, full/half duplex mode, and auto MDI/MDI-X connection
LED Indicators	PWR1, PWR2, FAULT, Link, Act
Ethernet Isolation	1500 Vrms 1 minute
DIP Switch	Ports loss link alarm mask
Console Port	Debugging, Monitoring, Setting
Power Input	
Redundant Input Range	Flexible input +24/+48 VDC Nominal. (+12 ~ +48 VDC)
Power Consumption	0.16A @ 48VDC Idle without loading; 0.2A @ 48VDC with full loading (0.12 W per ports) 0.31A @ 24VDC idle without loading; 0.39A @ 24VDC with full loading (0.12 W per ports)
Alarm Contact	One relay output with current carrying capacity of 1A @ 30 VDC
Protection	Power reverse polarity protection
Connector	6-Pin Removable Terminal Block (Power & Relay)
Mechanical	
Chassis	Metal with an IP30 ingress protection rating
Dimensions (W x L x H)	51 mm x 154 mm x 118 mm
Installation	DIN-Rail or Wall Mounting (with optional kit)
Environmental	
Operating Temperature	-40 °C ~ + 75 °C (-40 °F to 167 °F)
Storage Temperature	-40 °C ~ + 85 °C (-40 °F to 185 °F)
Ambient Relative Humidity	10 ~ 90% RH, non-condensing

Getting to know your NSM-316G Switch

Package Contents:

· NSM-316G
· DIN-Rail mounting (pre-installed on the unit)
· This manual

Note – optional wall mounting kits may be ordered

LED Indicator Functions:

LED	Color	Description
Ethernet Port	Green On	Link to 10/100/1000 Mbps
	Yellow On	Act
PWR1	Green On	This green LED is turned on when power is applied to the PWR1 input
PWR2	Yellow On	This yellow LED is turned on when power is applied to the PWR2 input
Fault	Red On	Any of the alarm enabled Port have been loss link.

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Pin Function for Terminal Block:

Pin	Function	Description
1	PWR1	Power1 input +12~+48VDC (V+)
2	P.GND	Power Ground.
3	RL_COM	Power Fault relay COM
4	RL_NO	Power Fault relay NO
5	PWR2	Power2 input +12~+48VDC (V+)
6	P.GND	Power Ground.

Redundant Power Input:

Both power inputs can be connected simultaneously to live DC power sources. If one power source fails, the other live source will act as a backup, and automatically supplies all of NSM-316G power needs.

External power supply is connected using the removable terminal block:
PWR (Power) : Power input (+12 ~ +48 VDC) and should be connected to the power supply (+)
GND**:** Ground and should be connected to the power supply (-)

Accessories(option):

DR-120-48	48 V/2.5 A, 120 W Single Output Industrial DIN Rail Power Supply
MDR-60-48	48 V/1.25 A, 60 W Single Output Industrial DIN Rail Power Supply
DR-120-24	24V/5 A, 120 W Single Output Industrial DIN Rail Power Supply
SDR-240-24	24 V/10 A, 240 W Single Output Industrial DIN Rail Power Supply with PFC Function

DIP Switch Settings:



DIP Switch	Setting	Description
Port Alarm Function (P1 to P16)	ON	Enables the PORT Alarm. When the port's loss link, the relay will forced an close circuit, and the fault LED will light up.
	OFF	Disable the PORT Alarm. When the port's loss link, there will no action from the relay, and it remain in open circuit, and the fault LED will not light up.

Console Port:

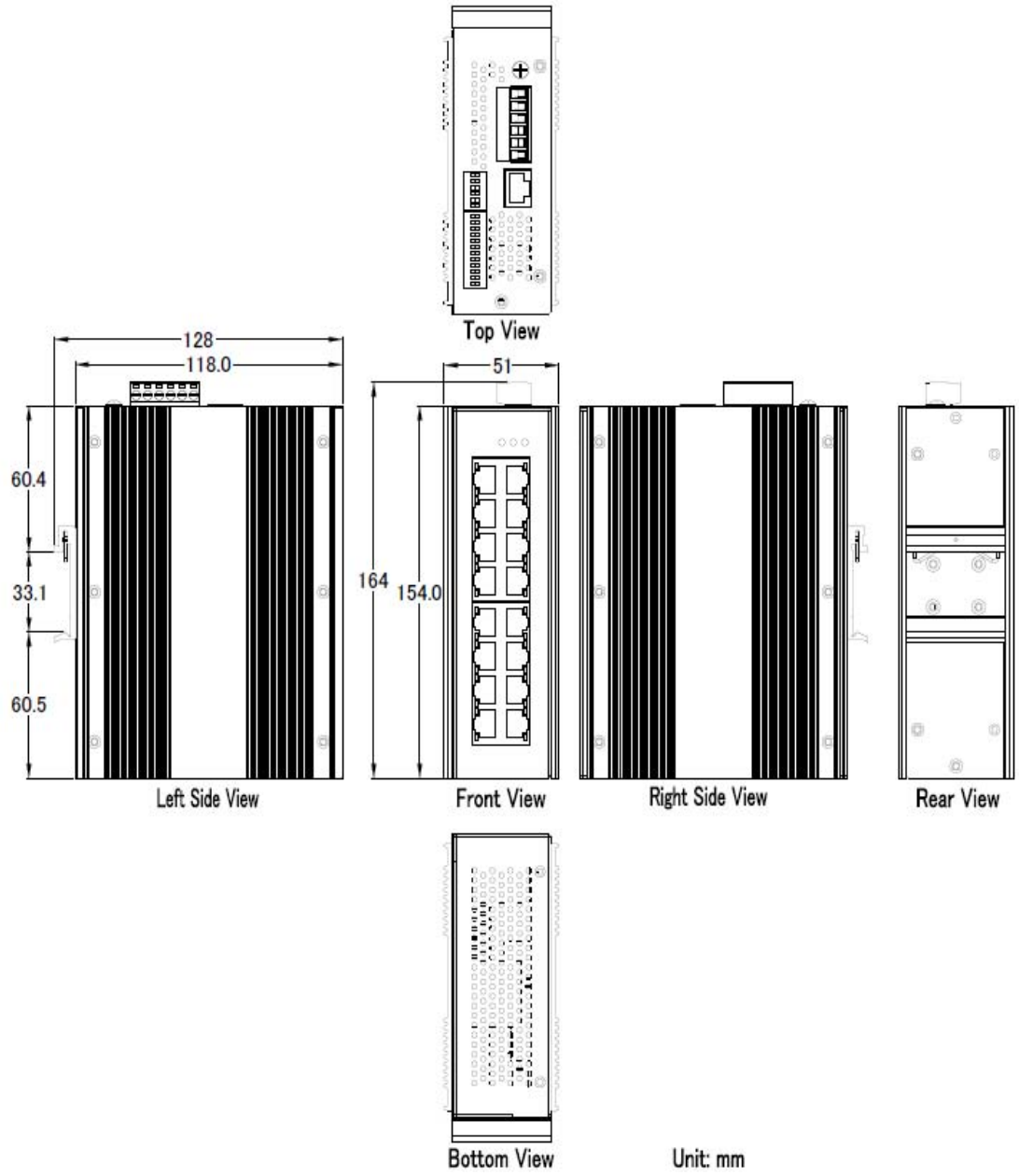
A RS-232 with RJ45 connecter, for debugging, monitoring and setting, the baud rate of this port is 9600,n,8,1.

Accessories(option):

CA-090510	9-pin Female D-sub & RJ-45 cable,1M

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Dimensions (unit = mm):



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