# 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<sup>™</sup> (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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### **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):

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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	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.
Function (P1 to P16)	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.

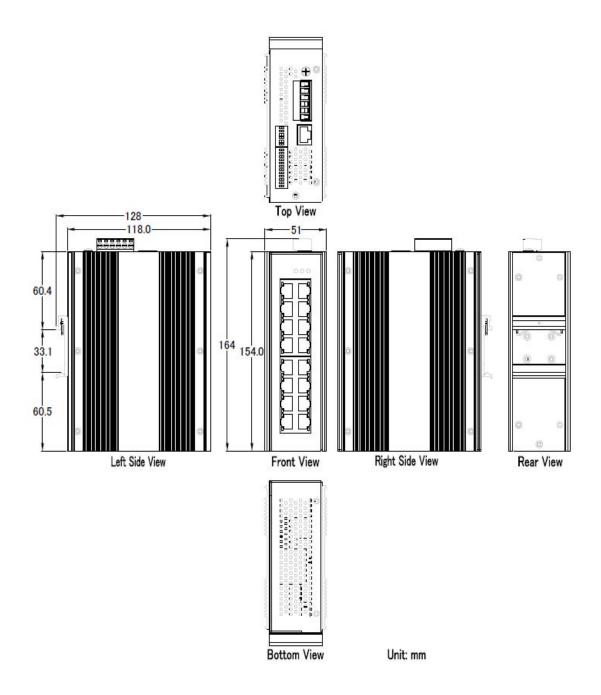
#### Accessories(option):

<b>CA-090510</b> 9-pin Female D-sub & RJ-45 cable,1M
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# Dimensions (unit = mm):



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