DYNICS

SDN-1U160804A1-01G
SDN-1U160804D1-01G

SDN-1U160804X1-01G | Industrial Software Defined Network Switch

DYNICS SDN-1U160804 is a managed switch supporting 16x RJ45 NICS, 8x dual speed SFP combo ports, and 4x SFP NICS. It is a 1U 17" Rackmount unit available with either VAC or VDC redundant power entry. The SDN-1U160804 supports industrial automation protocols Ethernet/IP and Modbus TCP

Key Features

- 96~264VAC / 12~48VDC Redundant Power Entry Options
- Overload Current Protected

- 1U 17" Rack-Mountable
- IP30 Rating
- Reverse Polarity Protected

- 16x RJ45 10/100/1000T NICS, 8x 10/100/1000T Combo Ports, and 4x 1Gb SFP Ports

Hardware Specifications

NICS	16x RJ45 10/100/1000T NICS, 8x 10/100/1000T Dual Speed SFP Combo Port + Auto Media Detect, and 4x 1Gb SFP Ports
UTILITY PORTS	1x RS232 Serial Console RJ45 connector, 1x USB 2.0 storage
POWER SUPPLY	Power Entry Options: 90~264VAC (3-Pin) – Order Number: SDN-1U160804A1-01G 12~48VDC (4-Pin) – Order Number: SDN-1U160804D1-01G
TEMPERATURE	Operating: -40°-75°C | -40°-167°F | Non-Operating: -40°-85°C | -40°-185°F
RELATIVE HUMIDITY	Non-Condensing: 5% - 95%
SHOCK RESISTANCE	IAW IEC60068-2-27
VIBRATION	IAW IEC60068-2-6
INCLUDED	Rack Mounting Brackets and 6ft. US Power Cord
COMPLIANCE	FCC Part 15 Subpart B Class A CE EN 55032 Class A UL 60950-1/62368 (Pending) European Union Directive 2011/65/EU (RoHS)
WARRANTY	3-year limited warranty. Extended warranty available, contact DYNICS for more details.
TECHNICAL SUPPORT & MAINTENANCE	Available, Renews Yearly, Contact DYNICS for details.

Software Defined Networking Overview

Networking is a critical component of industrial control systems (ICS). ICS networks differ significantly from information technology networks. Unfortunately, most existing Ethernet networking-related technologies are based on information technologies and practices. While information technology networks must manage dynamic environments, ICS networks are typically less dynamic and more repeatable in terms of network communications. ICS networks control processes including factory floor automation, food processing, water and wastewater system, and electric power distribution.

Software Defined Networking (SDN), among other things, addresses reliability, visibility, data traffic control, network segmentation, and deny-by-default security.

We have adapted (SDN) to address demanding ICS requirements that traditional networking technologies are unable to do. SDN is an architectural networking concept that separates network configuration, or control plane, from the switch, or data plane. What this allows ICS network designers and engineers to do is define exactly what traffic and to which devices the traffic is allowed to flow within an ICS network. SDN technology also obsoletes complex concepts including VLANS, Spanning Trees, Network loops, and allows ICS networks to be designed to fit the requirements of the control system *using standard IEEE 802.3 Ethernet*. Network designers and engineers are not encumbered by traditional information technology practices.

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## Dimensions, Weight and Power Consumption

HEIGHT	1.73" (44.0mm)
WIDTH	17.32" (440.0mm)
DEPTH	13.03" (331.0mm)
WEIGHT	10.58 lbs.*
POWER CONSUMPTION	0.3A @ 110VAC **
	0.82A @ 24VDC **

* Weights are approximate, contact DYNICS for details.

** Power consumption is based on maximum ratings; actual ratings vary significantly based on components used.

Mechanical Drawings

FRONT AND TOP VIEW

13.03" [331.0mm]

17.32" [440.0mm]

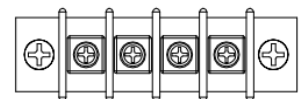1.73" [44.0mm]

17.32" [440.0mm]
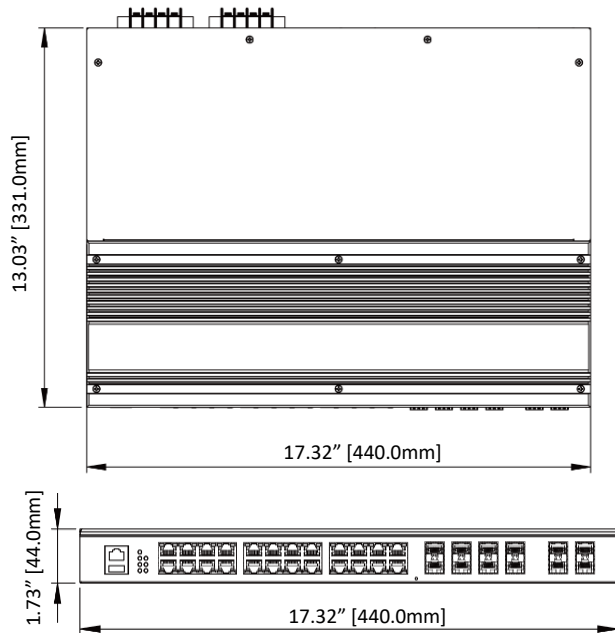
SIDE VIEW

POWER ENTRY

96~264VAC (3-Pin Socket)   **12~48VDC (4-Pin Terminal)**

All measurements are in inches and pounds, unless noted. Pictures and drawings are not to scale. Estimated weight may change depending on options. DYNICS reserves the right to change, modify, upgrade, or discontinue any part of this datasheet without any prior notice.

RoHS COMPLIANT

IP30 IP Rated

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CE