

SDN-1U2404XXA1-10G  
SDN-1U2404XXD1-10G



## SDN-1U2404 | Industrial Software Defined Network Switch

DYNICS SDN-1U2404 is a managed switch supporting 24x RJ45 NICS and 4x SFP+ NICS. It is a 1U 17" Rackmount unit available with either VAC or VDC power entry. The SDN-1U2404 supports in-band or out-of-band management via OpenFlow 1.3.5 compatible SDN Controllers such as the Veracity's Net-Optix OT SDN controller.

### Key Features

- 90~264VAC / 12~48VDC Power Entry Options
- Overload Current Protected
- 1U 17" Rack-Mountable
- IP30 Rating
- Reverse Polarity Protected
- 24x RJ45 10/100/1000T NICS and 4x 1/10Gb SFP+ Ports

### Hardware Specifications

|  |   |
|--|---|
| <b>NICS</b>                                | 24x RJ45 10/100/1000T NICS and 4x 1/10Gb SFP+ Ports   |
| <b>UTILITY PORTS</b>                       | 1x RS232 Serial Console RJ45 connector, 1x USB 2.0 storage  |
| <b>POWER SUPPLY</b>                        | Power Entry Options:<br>90~264VAC (3-Pin) – Order Number: SDN-1U2404XXA1-10G<br>12~48VDC (4-Pin) – Order Number: SDN-1U2404XXD1-10G                 |
| <b>TEMPERATURE</b>                         | Operating: -40°-60°C   32°-140F   Non-Operating: -40°-85°C   -40°-185°F   |
| <b>RELATIVE HUMIDITY</b>                   | Non-Condensing: 5% - 95%  |
| <b>SHOCK RESISTANCE</b>                    | IAW IEC60068-2-27   |
| <b>VIBRATION</b>                           | IAW IEC60068-2-6  |
| <b>INCLUDED COMPLIANCE</b>                 | Rack Mounting Brackets and 6ft. US Power Cord<br>FCC Part 15 Subpart B Class A<br>CE EN 55032 Class A<br>European Union Directive 2011/65/EU (RoHS) |
| <b>WARRANTY</b>                            | 3-year limited warranty. Extended warranty available, contact DYNICS for more details.  |
| <b>TECHNICAL SUPPORT &amp; MAINTENANCE</b> | 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.



**SDN-1U2404XXA1-10G**



**Dimensions, Weight and Power Consumption**

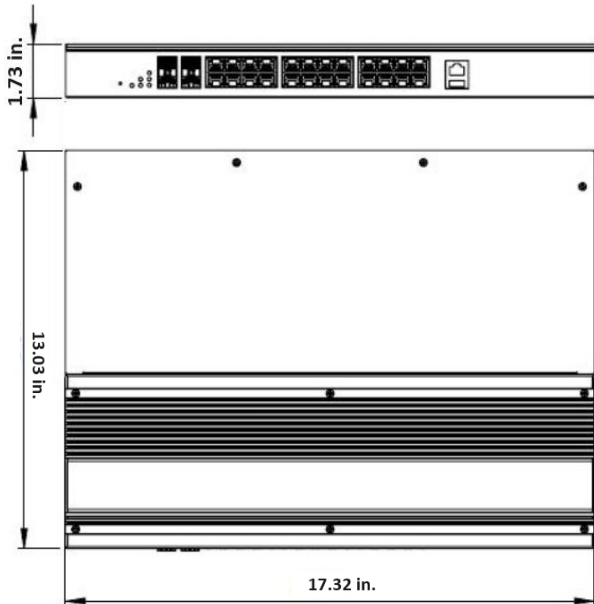
|                          |                                      |
|--------------------------|--------------------------------------|
| <b>HEIGHT</b>            | 1.73" (44.0mm)                       |
| <b>WIDTH</b>             | 17.32" (440.0mm)                     |
| <b>DEPTH</b>             | 13.03" (331.0mm)                     |
| <b>WEIGHT</b>            | 13.23 lbs.*                          |
| <b>POWER CONSUMPTION</b> | 0.3A @ 110VAC **<br>1.55A @ 12VDC ** |

\* 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**



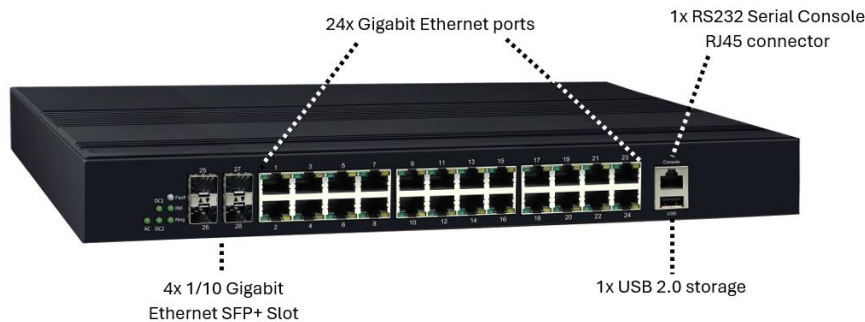
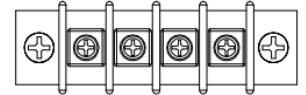
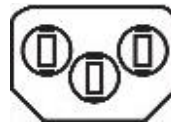
**SIDE VIEW**



**POWER ENTRY**

90~264VAC (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.