











# Stratix Industrial Networks Infrastructure At-A-Glance

|                           | Switching and Routing                        |                                |                              |                                       |                                       |   |                                       | Services Router                                     | Wireless                      |  |
|---------------------------|--|--------------------------------|------------------------------|---------------------------------------|---------------------------------------|---|---------------------------------------|---|-------------------------------|--|
| Hardware Features         | 1783-NATR Network Address Translation Router | Stratix 2000™ Unmanaged Switch | Stratix 6000™ Managed Switch | Stratix 5700™ Managed Switch          | ArmorStratix™ 5700 Managed Switch     | Stratix 8000™ and Stratix 8300™ Managed Switch                                | Stratix 5400™ Managed Switch          | Stratix 5410™ Distribution Switch                   | Stratix 5900™ Services Router | Stratix 5100™ Wireless Access Point/Workgroup Bridge |
| Ports Per Module          | 2  | 5 to 16                        | 4 and 9 port versions        | 6, 10, 18 and 20 port versions        | 8, 10, 16, 18, 24 port versions       | 6 and 10 port base switches copper, fiber, SFP slot and PoE expansion modules | 8, 12, 16 and 20 port versions        | 28  | 4 LAN, 1 WAN                  | 1  |
| Total Max Ports           | 2  | up to 16                       | 9                            | 20                                    | up to 24                              | up to 26  | 20                                    | 28  | 4 LAN, 1 WAN                  | 2<br>(1 Ethernet, 1 Console)                         |
| Fiber Ports               | —  | up to 2                        | 9 port version: 1 SFP slot   | up to 4 SFP slots                     | —                                     | up to 14 SFP slots  | up to 12 SFP slots                    | 16 SFP slots  | 0                             | —  |
| Copper Ports              | 2  | up to 16                       | 4 or 8 ports                 | 6 to 18 ports                         | 8 to 24                               | 6 to 26   | 8 to 20 ports                         | 12  | 5                             | —  |
| 1G Ports                  | —  | up to 6 copper and 2 SFP slots | 9 port version: 1 SFP slot   | up to 2 copper or SFP slots           | up to 2 copper                        | 2 copper or SFP slots   | All                                   | All   | 1 WAN                         | 1  |
| 100 Mbs Fiber Support     | —  | Yes                            | —                            | Yes                                   | —                                     | Yes   | Yes                                   | Yes   | —                             | —  |
| 1G Fiber Support          | —  | Yes                            | 9 port version only          | Yes                                   | up to 12                              | Yes   | Yes                                   | Yes   | —                             | —  |
| 10G Fiber Support         | —  | —                              | —                            | —                                     | —                                     | —   | —                                     | Yes   | —                             | —  |
| Power over Ethernet (PoE) | —  | —                              | —                            | up to 4 ports                         | up to 8 ports                         | up to 12 ports  | up to 8 ports                         | up to 12 ports, may require additional power supply | —                             | —  |
| Flash Memory              | Yes (SD card)                                | —                              | —                            | Internal Flash and SD card (optional) | Internal Flash and SD card (optional) | Compact flash card (included)   | Internal Flash and SD card (included) | Internal Flash and SD card (included)               | —                             | 32 MB nonvolatile memory                             |

**Power over Ethernet (PoE)** provides electrical power along with data on a single Ethernet cable to end devices.

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|-----------------------|--|---|---|---|--|---|---|---|---|---|
| Specification         | 1783-NATR<br>Network Address<br>Translation Router   | Stratix 2000™<br>Unmanaged<br>Switch  | Stratix 6000™<br>Managed Switch   | Stratix 5700™<br>Managed Switch   | ArmorStratix™<br>5700<br>Managed Switch                          | Stratix 8000™ and<br>Stratix 8300™<br>Managed Switch  | Stratix 5400™<br>Managed Switch   | Stratix 5410™<br>Distribution<br>Switch   | Stratix 5900™<br>Services Router                | Stratix 5100™<br>Wireless Access<br>Point/Workgroup<br>Bridge |
| Operating Temperature | -25 to 70 °C   | 1783-USST and<br>1783-US8T:<br>0 °C to +60 °C<br><br>1783-US4T1F,<br>1783-US4T1H,<br>1784-US5TG,<br>1783-US6T2F,<br>1783-US6T2H,<br>1783-US6TG2CG,<br>1783-US7T1F,<br>1783-US7T1H,<br>1783-US14T2S,<br>1783-US16T:<br>-40 to +70 °C | 0 to 60 °C  | -40 to 60 °C  | -40 to 60 °C   | -40 to 60 °C  | -40 to 70 °C  | -40 to 60 °C  | -25 to 60 °C                                    | 0 to 60 °C  |
| Environmental Rating  | None (open-type)   | IP20  | IP20  | IP30  | IP67   | IP20  | IP30  | IP30  | IP30  | —   |
| Dimensions            | 131 mm H<br>35 mm W<br>104 mm D  | 115-135 mm H<br>30-88 mm W<br>115.82 - 146.30 mm D  | 114mm H<br>51mm W<br>89 mm D  | 130 mm H<br>75 to 127 mm W<br>117 to 128 mm D   | 240 mm H<br>240 to 370 mm W<br>60 to 80 mm D                     | Base Switch<br>Expansion: Module:<br>• 146 mm H • 147 mm H<br>• 152 mm W • 97 mm W<br>• 122 mm D • 122 mm D     | 160 mm H<br>150 mm W<br>129 mm D  | 40 mm H<br>440 mm W<br>300 mm D   | 44 mm H<br>196 mm W<br>206 mm D                 | 220 mm H<br>220 mm W<br>40 mm D                               |
| Power Requirements    | 20.4V - 27.6V DC   | 24V (18...60V DC,<br>18...30V AC 50/60 Hz),<br>Class 2 / SELV   | 12-48V DC Class 2<br>/ SELV   | 12V/24V/48V DC<br>Class 2 / SELV  | 12V/24V/48V DC<br>Class 2 / SELV                                 | 18V-60V DC  | 12V-54V DC  | 24V-60V DC or<br>100-240V DC and<br>100-250V DC   | 85V-264V AC<br>100V-240V AC nom                 | 48V DC or PoE   |
| Certifications        | c-UL-us Certified /<br>Class I, D 2, Groups<br>A,B,C,D / CE / RCM /<br>ATEX / IECEx / KCC /<br>EtherNet/IP | c-UL-us Certified /<br>Class I, D 2, Groups<br>A,B,C,D / CE / ATEX /<br>RCM / KCC   | c-UL-us I.T.E. / c-ETL-us<br>Class I, D 2, Groups<br>A,B,C,D / ATEX / CE /<br>RCM / EtherNet/IP | c-UL-us Certified / Class<br>I, D 2, Groups A,B,C,D<br>/ CE / RCM / ATEX /<br>EtherNet/IP / Marine<br>/ KCC / Anatel / BSMI<br>Taiwan / RCM | cUL Certified / CE / RCM<br>/ KCC / EtherNet/IP /<br>BSMI Taiwan | c-UL-us Certified / Class I,<br>D 2, Groups A,B,C,D / CE /<br>RCM / ATEX/EtherNet/IP/<br>Marine/KCC/BSMI Taiwan | c-UL-us Certified / Class<br>I, D 2, Groups A,B,C,<br>D / CE / RCM / ATEX<br>/ EtherNet/IP / KCC /<br>BSMI Taiwan | c-UL-us Certified/Class I,<br>D 2, Groups A,B,C,D / CE /<br>RCM / ATEX /<br>EtherNet/IP / KCC | c-UL-us ITE Certified / CE<br>/ RCM / CCC / KCC | 802.11n v2 / cUL<br>Certified / EtherNet/IP                   |
| More Information      | 1783-TD001   | 1783-TD001  | 1783-TD001  | 1783-TD001  | 1783-TD001   | 1783-TD001  | 1783-TD001  | 1783-TD001  | 1783-TD001                                      | 1783-TD001  |

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|-----------------------------------|---|---|---|---|--|---|---|---|---|---|
|                                   | 1783-NATR<br>Network Address<br>Translation Router                                | Stratix 2000™<br>Unmanaged<br>Switch  | Stratix 6000™<br>Managed Switch   | Stratix 5700™<br>Managed Switch   | ArmorStratix™<br>5700<br>Managed Switch  | Stratix 8000™ and<br>Stratix 8300™<br>Managed Switch                                | Stratix 5400™<br>Managed Switch   | Stratix 5410™<br>Distribution<br>Switch   | Stratix 5900™<br>Services Router  | Stratix 5100™<br>Wireless Access<br>Point/Workgroup<br>Bridge                       |
| <b>Software Features</b>          |  |  |  |  |  |  |  |  |  |  |
| Cisco IOS                         | —   | —   | —   | Yes   | Yes  | Yes   | Yes   | Yes   | Yes   | 15.3 with Device Manager  |
| Quality of Service (QoS)          | Yes, on Private port  | —   | Yes   | Yes*  | Yes  | Yes   | Yes   | Yes   | Yes   | Yes   |
| Layer 3 routing                   | —   | —   | —   | —   | —  | 8300 Only   | Yes**   | Yes**   | Yes   | Yes   |
| DLR (Device Level Ring)           | Yes   | —   | —   | Yes, select versions  | —  | —   | —   | —   | —   | —   |
| IGMP snooping and query           | Yes   | —   | Yes   | Yes   | Yes  | Yes   | Yes   | Yes   | Yes   | —   |
| STP/RSTP                          | —   | —   | Yes   | Yes   | Yes  | Yes   | Yes   | Yes   | Yes   | Yes   |
| SNMP support                      | —   | —   | Yes   | Yes   | Yes  | Yes   | Yes   | Yes   | Yes   | Yes   |
| Etherchannels                     | —   | —   | —   | Yes*  | Yes  | Yes   | Yes   | Yes   | —   | —   |
| REP (Resilient Ethernet Protocol) | —   | —   | —   | Yes   | Yes  | Yes   | Yes   | Yes   | —   | Cisco Discovery Protocol (CDP)  |
| CIP Sync (IEEE 1588)              | Yes, on Private port  | Yes, pass through   | Yes, pass through   | Yes**   | Yes**  | Yes   | Yes   | Yes   | Yes, pass through   | Limited   |
| Static and InterVLAN Routing      | —   | —   | —   | Yes*  | Yes  | Yes   | Yes   | Yes   | Yes   | —   |
| VLANs                             | —   | —   | Yes   | Yes with trunking   | Yes with trunking  | Yes with trunking   | Yes with trunking   | Yes with trunking   | Yes with trunking   | Yes with trunking   |
| Network Address Translation (NAT) | Yes (UP TO 32)  | —   | —   | Yes**   | Yes**  | —   | Yes   | Yes   | Yes   | —   |

\* Software Option \*\* Option

**CIP SYNC (IEEE1588)** is the ODVA implementation of the IEEE 1588 precision time protocol. This protocol allows very high precision clock synchronization across automation devices. CIP SYNC is an enabling technology for time-critical automation tasks such as accurate alarming for post-event diagnostics, precision motion and high precision first fault detection or sequence of events.

**Cisco IOS (Internetwork Operating System)** is the software operating system used on the majority of Cisco network routing and switch devices. Cisco IOS has a command line interface (CLI) that provides a very flexible configuration tool which is familiar to IT professionals. The Cisco Catalyst switch architecture and feature set provides a set of robust features compatible with the Cisco IT enterprise environment.

**DLR (Device Level Ring)** Allows establishment of a resilient ring network at the device level without the need of external switching hardware. The fast network recovery rate makes the protocol ideal for real-time control applications. The DLR protocol is a standard protocol supported and maintained by ODVA.

**EtherChannel** is a port trunking technology. EtherChannel allows grouping several physical Ethernet ports to create one logical Ethernet port. Should a link fail, the EtherChannel technology will automatically redistribute traffic across the remaining links.

**IGMP Snooping** (Internet Group Management Protocol) constrains the flooding of multicast traffic by dynamically configuring switch ports so that multicast traffic is forwarded only to ports associated with a particular IP multicast group

**Layer 3 Routing** allows the capability to route between VLANs and subnets. This feature includes static routing, dynamic routing, multicast routing, redundant routing and IPv6 routing.

**Network Address Translation (NAT)** provides 1:1 translations of IP addresses from one subnet to another. Can be used to integrate machines into an existing network architecture.

**Quality of Service (QoS)** is the ability to provide different priority to different applications, users, or data flows, to help provide a higher level of determinism on your network.

**REP (Resilient Ethernet Protocol)** A ring protocol that allows switches to be connected in a ring, ring segment or nested ring segments. REP provides network resiliency across switches with a rapid recovery time ideal for industrial automation applications.

**Smartports** provide a set of configurations to optimize port settings for common devices like automation devices, switches, routers, PCs and wireless devices. Smartports can also be customized for specific needs.






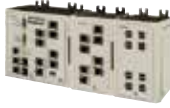




**SNMP** Simple Network Management Protocol (SNMP) is a management protocol typically used by IT to help monitor and configure network-attached devices.

**Static and InterVLAN Routing** bridges the gap between layer 2 and layer 3 routing providing limited static and connected routes across VLANs.

**STP/RSTP** Spanning Tree Protocol, is a feature that provides a resilient path between switches. Used for applications that requires a fault tolerant network.

**VLANs with Trunking** is a feature that allows you to group devices with a common set of requirements into network segments. VLANs can be used to provide scalability, security and management to your network.

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| <b>Security Features</b>                                    |  |  |  |  |  |  |  |  |  |  |
| Port control in Logix                                       | —   | —   | —   | Yes   | Yes  | Yes   | Yes   | Yes   | —   | —   |
| Port Security   | —   | —   | —   | Yes*  | Yes  | Yes   | Yes   | Yes   | Yes   | Yes   |
| Access Control Lists (ACL)                                  | —   | —   | —   | Yes*  | Yes  | Yes   | Yes   | Yes   | Yes   | Yes   |
| IEEE 802.1x Security  | —   | —   | —   | Yes*  | Yes  | Yes   | Yes   | Yes   | Yes   | Yes***  |
| Stateful Inspection Firewall<br>- Zone-Based Firewall (ZFW) | —   | —   | —   | —   | —  | —   | —   | —   | Yes   | —   |
| VPN-IPsec   | —   | —   | —   | —   | —  | —   | —   | —   | Yes   | —   |
| Centralized Authentication<br>Capable (RADIUS, TACACS+)     | —   | —   | —   | Yes*  | Yes  | Yes   | Yes   | Yes   | Yes   | Yes   |

**Access Control Lists** allow you to filter network traffic. This can be used to selectively block types of traffic to provide traffic flow control or provide a basic level of security for accessing your network.

\* Software Option  
\*\* Option  
\*\*\* also 802.11i WPA2

# Stratix Industrial Networks Infrastructure At-A-Glance

| Stratix Configuration & Troubleshooting Features | Switching and Routing                        |                                |                              |                              |                                   |  |                              | Services Router                   | Wireless                      |  |
|--|--|--------------------------------|------------------------------|------------------------------|-----------------------------------|--|------------------------------|-----------------------------------|-------------------------------|--|
|  | 1783-NATR Network Address Translation Router | Stratix 2000™ Unmanaged Switch | Stratix 6000™ Managed Switch | Stratix 5700™ Managed Switch | ArmorStratix™ 5700 Managed Switch | Stratix 8000™ and Stratix 8300™ Managed Switch | Stratix 5400™ Managed Switch | Stratix 5410™ Distribution Switch | Stratix 5900™ Services Router | Stratix 5100™ Wireless Access Point/Workgroup Bridge |
| Device Manager                                   | —  | —                              | —                            | Yes                          | Yes                               | Yes  | Yes                          | Yes                               | Yes*                          | Yes  |
| Stratix Configurator                             | —  | —                              | —                            | —                            | —                                 | —  | —                            | —                                 | Yes                           | Yes  |
| Cisco Network Assistant                          | —  | —                              | —                            | Yes                          | Yes                               | Yes  | Yes                          | Yes                               | —                             | Yes  |
| Command Line Interface                           | —  | —                              | —                            | Yes                          | Yes                               | Yes  | Yes                          | Yes                               | Yes                           | Yes  |
| AOP (CIP)  | Yes, EDS AOP                                 | —                              | Yes                          | Yes                          | Yes                               | Yes  | Yes                          | Yes                               | —                             | Yes  |
| SmartPorts                                       | —  | —                              | —                            | Yes                          | Yes                               | Yes  | Yes                          | Yes                               | —                             | —  |
| Real-time Diagnostics                            | Yes  | —                              | —                            | Yes                          | Yes                               | Yes  | Yes                          | Yes                               | —                             | Yes  |
| Sample Faceplates                                | —  | —                              | Yes                          | Yes                          | Yes                               | Yes  | Yes                          | Yes                               | —                             | Yes  |
| Compact Flash                                    | —  | —                              | —                            | —                            | —                                 | Yes  | —                            | —                                 | —                             | —  |
| SD Card  | Yes  | —                              | —                            | Yes**                        | Yes**                             | —  | Yes                          | Yes                               | —                             | —  |
| DHCP Per Port                                    | —  | —                              | —                            | Yes                          | Yes                               | Yes  | Yes                          | Yes                               | —                             | Yes  |

**DHCP per port** allows you to assign a specific IP address to each port, ensuring that the device attached to a given port will get the same IP address. This feature allows for device replacement without having to manually configure IP addresses.

\* Software Option  
\*\* Option