



# FLEXIBLE, FAST ETHERNET SWITCHING AT AN ATTRACTIVE PRICE

# NORTEL

## Product Brief

### Nortel Ethernet Routing Switch 2500 Series

**Nortel's Ethernet Routing Switch 2500 series combines enterprise-class features, convergence-ready Layer 2 and Layer 3 functionality, and investment protection in one secure, affordable solution.**

The Nortel Ethernet Routing Switch (ERS) 2500 series is a family of cost-effective, stackable 10/100BaseT Ethernet switching products perfectly suited for branch offices of larger enterprises, or the enterprise edge, requiring a low-cost but feature-rich solution in the wiring closet.

Ideal for enterprises with big plans but not-so-big budgets, the Ethernet Routing Switch 2500 offers the flexibility, scalability and cost-effectiveness to deploy next-generation technology today — while providing the high resiliency and performance you need.

### Convergence-ready, for VoIP and more

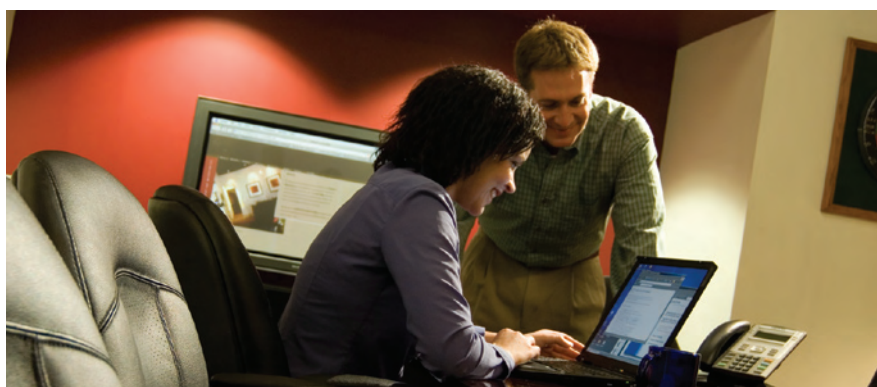
The Ethernet Routing Switch 2500 series offers outstanding value as a convergence-ready edge switch. It delivers 802.3af standards-based Power over Ethernet (PoE) to support IP Telephony and Wireless LAN access points.

Ethernet Routing Switch 2500 models are available with or without Power over Ethernet (PoE). As not all network devices require PoE, the Ethernet Routing Switch 2500 provides the right mix of PoE and non-PoE ports, so you don't have to pay for power capacity that you're never likely to use. This also minimizes the concern for power and cooling requirements in the wiring closet that can sometimes be an issue with products that support PoE on all ports. This unique design results in a flexible and low-cost, convergence-ready solution that enables you to take advantage of:

- Economically priced non-PoE ports for devices such as printers, servers and other devices that don't require power from the network
- The convergence capabilities of PoE to support IP phones, network cameras, wireless access points, security, lighting and access control devices (e.g., badge readers)

The Ethernet Routing Switch 2500 is an energy-efficient branch office or wiring closet edge solution that consumes 40 percent less energy than competing products. Resilient Stacking provides a pay-as-you-grow solution that creates a single virtual switch for ease of configuration and management.

Additionally, the Ethernet Routing Switch 2500 family also uses the IEEE standard 802.1AB for auto discovery of devices such as IP handsets. Each 802.1AB-supporting device learns the identification, configuration and capabilities of neighboring devices, and provides these details to the network management system.



**Ethernet Routing Switch 2500 Series**

With the right mix of PoE and non-PoE ports (1/2 and 1/2), the Ethernet Routing Switch 2500 delivers the performance and convergence-ready features that until now have only been available in higher-priced switches.

Nortel further extends the use of this protocol by coupling it with the ability to automatically configure a port with QoS settings and VLAN membership when a Nortel IP handset is detected. This ensures fast and easy IP handset deployments across the network.

Convergence is further supported through the Ethernet Routing Switch 2500's Quality of Service (QoS) features. The Ethernet Routing Switch 2500 uses standards-based 802.1p and DSCP priority queuing to prioritize mission-critical traffic such as VoIP.

### Always on. Always available.

A stack of up to eight units can be created through the Ethernet Routing Switch 2500's support of fail-safe stacking.\* This allows the Ethernet Routing Switch 2500 series to scale up to 384 10/100 ports and 16 10/100/1000/SFP combo ports in a single stack while maintaining its management simplicity. Furthermore, through sub-second failovers in case of switch or stacking cable failure, the Ethernet Routing Switch 2500 can offer customers a solution that allows them access to their applications and network resources any time.

Figure 1. Converged connectivity



2 \* Requires stacking license or stack-enabled units.

## Nortel Ethernet Routing Switch 2500 Series

Model	Port configurations
ERS2526T	24 x 10/100 ports + 2 combo 10/100/1000BaseT/SFP mini-GBIC ports + 2 1000BaseT RJ-45 ports at the rear
ERS2526T PWR	24 x 10/100 ports (PoE supported on 12 ports) + 2 combo 10/100/1000BaseT/SFP mini-GBIC ports + 2 1000BaseT RJ-45 ports at the rear
ERS2550T	48 x 10/100 ports + 2 combo 10/100/1000BaseT/SFP mini-GBIC ports + 2 1000BaseT RJ-45 ports at the rear
ERS2550T PWR	48 x 10/100 ports (PoE supported on 24 ports) + 2 combo 10/100/1000BaseT/SFP mini-GBIC ports + 2 1000BaseT RJ-45 ports at the rear

Additionally, through the use of Cat5E stacking cables to interconnect the Ethernet Routing Switch 2500s, this intelligent solution enables its users to benefit from all of the resilience and scalability that comes from deploying a true stacking architecture yet maintains its cost-effectiveness and simplicity. To further complement the Ethernet Routing Switch 2500's fail-safe stacking architecture, Nortel also offers support for standards-based 802.3ad Link Aggregation as well as its own Multi-Link Trunking technology that allows users to create the grouping of ports to form high-speed trunks/aggregations. These bundles or groups of ports can be distributed across different units in the same stack, thus delivering higher levels of resilience in case of link or switch failure, ensuring that traffic arrives at its destination.

Stack health check monitoring provides a real-time at-a-glance view of switch stack operational status and health, further enhancing operational and management simplicity should any issues arise.



Ethernet Routing Switch 2500 rear

### Securing access to the network

The Ethernet Routing Switch 2500 offers high levels of security and flexibility, ensuring that only authorized personnel gain access to a company's LAN. Whether it is through use of an IEEE 802.1X-based EAP client or through a user/device MAC address, network managers can ensure that only those who have successfully been authenticated against a RADIUS server have access to their specified resources.

For further flexibility, the Ethernet Routing Switch 2500 can support the authentication of multiple devices/users on a single port. For example, if a user's PC connects into the network via an IP handset (Figure 1), the PC and the IP Phone can be authenticated for authorized use to that port. Additionally, if your company frequently has visitors, support for a Guest VLAN allows non-authenticated users to still use the network but to only have access to those resources that have been pre-specified for the Guest VLAN such as Internet access.

## Enterprise-class management

The Ethernet Routing Switch 2500 series is managed through Nortel's enterprise-class Command Line Interface (NNCLI). The NNCLI provides a common industry look and feel to CLI commands, helping to reduce training and operational costs. Additionally, Ethernet Routing Switch 2500 series switches can be easily managed and configured using Nortel's Device Manager or web-based management graphical user interfaces.

Secure management of the switch occurs through features such as Secure Shell (SSHv2) for encrypted telnet management access using an SSH client, via Device Manager using Simple Network Management Protocol (SNMPv3) or

using HTTPS/SSL secure web management. Additionally, an IP Manager List can be used to specify which management stations can access the switch by specifying up to 10 authorized management station IP addresses. Support for backing up and restoring an ASCII Configuration file provides the network administrator with the ability to quickly deploy the same configuration file among various switches as well as to maintain a backup of the switch configuration for future use — thus providing a solution that is simple to manage and maintain.

## Lifetime warranty

All Ethernet Routing Switch 2500 switches offer a lifetime warranty. A Nortel product hardware warranty is supported for as long as the original

end user continues to own or use the product, including fan and power supply. In the event of a discontinuance of product manufacture, the Nortel warranty support is limited to five (5) years from the announcement of discontinuance.

## Summary

When it comes to deploying converged solutions for the network edge, Nortel is uniquely positioned to help your business reduce costs by combining voice and data into an integrated system. Let us show you how Nortel's Ethernet Routing Switch 2500 series, along with other Nortel products, can help reduce costs, increase profitability and streamline operations, helping businesses gain a competitive edge.

## Ordering information

### Switch versions

Order code	Description
AL2500?01-E6	Ethernet Routing Switch 2526T – 24 port 10/100BaseT and 2 combo 10/100/1000BaseT or SFP ports (not shared, 26 front ports total), plus 2 1000BaseT rear ports.
AL2500?02-E6	Ethernet Routing Switch 2550T – 48 port 10/100BaseT and 2 combo 10/100/1000BaseT or SFP ports (not shared, 50 front ports total), plus 2 1000BaseT rear ports.
AL2500?11-E6	Ethernet Routing Switch 2526T-PWR – 24 port 10/100BaseT (of which 12 ports support 802.3af PoE) and 2 combo 10/100/1000BaseT or SFP ports (not shared, 26 front ports total), plus 2 1000BaseT rear ports.
AL2500?12-E6	Ethernet Routing Switch 2550T-PWR – 48 port 10/100BaseT (of which 24 ports support 802.3af PoE) and 2 combo 10/100/1000BaseT or SFP ports (not shared, 50 front ports total), plus 2 1000BaseT rear ports.
AL2515001	Ethernet Routing Switch 2500 Stacking License Kit, for 1 switch, to enable stacking functionality on ERS2500 series standalone switches. For use with AL2500xxx-E6 order codes. (one license required per switch).
AL2515002	Ethernet Routing Switch 2500 Stacking License Kit, for up to 10 switches, to enable stacking functionality on ERS2500 series standalone switches. For use with AL2500xxx-E6 order codes. (one license required per switch).
AL2515003	Ethernet Routing Switch 2500 Stacking License Kit, for up to 50 switches, to enable stacking functionality on ERS2500 series standalone switches. For use with AL2500xxx-E6 order codes. (one license required per switch).
AL2515004	Ethernet Routing Switch 2500 Stacking License Kit, for up to 100 switches, to enable stacking functionality on ERS2500 series standalone switches. For use with AL2500xxx-E6 order codes. (one license required per switch).
AL2515?01-E6	Ethernet Routing Switch 2526T with 24 10/100 ports, 2 combo 10/100/1000/SFP ports, 2 1000BaseT rear ports & 46cm stack cbl, with stacking enabled.
AL2515?02-E6	Ethernet Routing Switch 2550T with 48 10/100 ports, 2 combo 10/100/1000/SFP ports, 2 1000BaseT rear ports & 46cm stack cbl, with stacking enabled.
AL2515?11-E6	Ethernet Routing Switch 2526T-PWR with 24 10/100 ports (12 ports support PoE), 2 combo 10/100/1000/SFP ports, 2 1000BaseT rear ports & 46cm stack cbl, with stacking enabled.
AL2515?12-E6	Ethernet Routing Switch 2550T-PWR with 48 10/100 ports (24 ports support PoE), 2 combo 10/100/1000/SFP ports, 2 1000BaseT rear ports & 46cm stack cbl, with stacking enabled.
AL2518001-E6	Stack Cable, 46cm (1.5ft) for Ethernet Routing Switch 2500 series (for use as spare).
AL2518002-E6	Stack Cable 1.5m (3ft) for Ethernet Routing Switch 2500 series (spare or for use as return cable for resiliency).
AL2518003-E6	Stack Cable 3m (10ft) for Ethernet Routing Switch 2500 series (spare or for use as return cable for resiliency).

- ? - The seventh character (?) of the switch order number must be replaced with the proper code to indicate desired product nationalization:
- "A" - No power cord included
- "B" - Includes European "Schuko" power cord common in Austria, Belgium, Finland, France, Germany, The Netherlands, Norway, and Sweden
- "C" - Includes power cord commonly used in the United Kingdom and Ireland
- "D" - Includes power cord commonly used in Japan
- "E" - Includes North American power cord
- "F" - Includes Australian power cord, also commonly used in New Zealand and the People's Republic of China

