

# Ready-to-Plug SONiC Open Switch

E.C.I. NETWORKS' Ready-to-Plug SONiC Switches provide a comprehensive, hassle-free solution for businesses aiming to establish their network infrastructure using open hardware switches and the Microsoft SONiC open-source NOS (Network Operating System). Pre-loaded with the SONiC Distribution by Broadcom and backed by maintenance and support services, these switches empower businesses to efficiently construct, operate, and manage their networks.



## Key Features

- High-performance hardware for advanced networking including AI needs.
- Open hardware: Our switches are built using open hardware platforms.
- Speed and feed options: Our switches support a range of speed and feed options, including 1G, 10G, 40G, 100G, 400G, and 800G, making them suitable for networks of all sizes.
- Ready-to-Plug Switches are preloaded with the Broadcom SONiC Enterprise Base package.
- The Enterprise Base Package comprises the following essential components:
  - Underlay features (RoCEv2, eBGP, ZTP, programmatic API, QoS, ACL)
  - Overlay features (BGP, EVPN, VXLAN)
  - Enterprise Features (RPVST+, IP Multicast/IGMP)
  - Base telemetry features: Thresholds and Snapshots (BST)
- Other packages are available upon request.
  - Enterprise Advanced Package:
    - Includes all features in Enterprise Base
    - Inband Flow Analyzer (IFA, version 2.0), Tail Stamping, Drop Monitor
    - Linux PTP (KNETSync)
    - Broadcom Debug Tool

- Cloud Base Package:
  - Features/functionality (e.g., eBGP, ZTP, programmatic API, QoS, ACL, TACACS+)
  - Base telemetry features: Thresholds and Snapshots (BST)
- Cloud Advanced Package:
  - Includes all features in Cloud Base
  - Inband Flow Analyzer (IFA, version 2.0), Tail Stamping, and Drop Monitor
  - Linux PTP (KNETSync)
- Campus Package:
  - Includes L2/L3 features
  - Additional features:
    - POE, POE+, POE-bt
    - Port Access Control (IEEE 802.1X, MAB, dynamic ACLs, RADIUS-assigned VLANs, RADIUS support)
    - LLDP-MED
    - Port Security
    - Digital Optical Monitoring and Time Domain Reflectometry
    - EVPN VXLAN

## Applications

Ready-to-Plug SONiC Switches offer various hardware options:

- Data Center Switch: Engineered for large-scale deployments, featuring 32-64x 40G/100G/400G Ethernet ports. Ideal for Leaf/Tor/Spine/Superspines applications.
- Campus Switch: Versatile for campus and enterprise networks, with 48x 1G/2.5G/10G ports and PoE, supporting up to 6x 40G/100G uplinks.
- Management Switch: Compact and cost-effective, featuring 48x 1G Ethernet ports and up to 6x 10G/25G/100G uplinks.

## Benefits of Adopting and adapting SONiC



Adopting and Adapting SONiC as a network operating system offers businesses various benefits such as flexibility, scalability, cost-effectiveness, and reliability.

- **Openness:** SONiC is open-source, allowing businesses to customize their network infrastructure without being locked into proprietary solutions.
- **Flexibility:** SONiC is hardware-agnostic, enabling businesses to choose the hardware that best fits their needs without vendor restrictions.
- **Scalability:** SONiC is highly scalable, suitable for networks of all sizes, with support for various hardware options and port densities.
- **Reliability:** Built on a stable codebase, SONiC has been extensively tested in real-world environments.

- **Security:** SONiC includes built-in security features like MACsec for network protection against unauthorized access and data breaches.
- **Cost Savings:** Businesses can save up to 40% over five years with SONiC due to lower hardware costs, licensing fees, and maintenance expenses.

## Customer use cases included

- Data Center L3 CLOS (underlay) use case.
- Network Fabric Underlay for VMware Deployments (NSX, ESX, vSAN).
- Multi-Tenancy with VXLAN EVPN.
- Data Center Interconnect (DCI) with three distinct use cases:
  - MultiPod: Enables VXLAN tunnels stretched across multiple PODs.
  - Multi-Fabric: VXLAN tunnels terminated locally in each pod.
  - Multi-Site: Provides a scalable and controlled way of stretching L2/L3 services across DCI.
- IP Storage Networking in Converged Fabric (RoCEv2).
- Campus Use case with Access/Aggregation:
  - Power over Ethernet (PoE, PoE+, PoE-bt 802.3bt) and LLDP-MED supporting IP Phones, APs, CCTV, IoT devices.
  - Integration with Cisco ISE, Aruba Clearpass, and Free Radius.
- AI Networking with Tomahawk 5 (Roadmap).

## Maintenance and Support Included

Ready-to-Plug SONiC Switches come bundled with a minimum of 3-year standard maintenance and support services, including:

1. Technical support: Access to experienced network engineers for issue resolution.
2. Level 3 support by Broadcom
3. Software updates and patches: Ensuring switches are always secure and up-to-date.
4. Hardware warranty: Protection against defects or malfunctions.
5. Optional 24x7 premium support services are available.

## Ordering Information

### Ready-To-Plug Switch Kits

Part Number	Sales Description
<b>SONiC400-3Y-AC-F-US</b>	Ready-to-Plug SONiC Open Switch 400G Kit contains a 32x400G ports Switch with SONiC + version pre-installed, F2B, AC PSU + SONIC 400G Maintenance & Support-3 Year (per switch)
<b>SONiC400-3Y-DC-F-US</b>	Ready-to-Plug SONiC Open Switch 400G Kit contains a 32x400G ports Switch with Broadcom SONIC version pre-installed, F2B, DC PSU + SONIC 400G Maintenance & Support-3 Year (per switch)
<b>SONiC100-3Y-AC-F-US</b>	Ready-to-Plug SONiC Open Switch 100G Kit contains a 32x100G ports Switch with Broadcom SONIC version pre-installed, F2B, AC PSU + SONIC 40G/100G Maintenance & Support-3 Year (per switch)
<b>SONiC100-3Y-DC-F-US</b>	Ready-to-Plug SONiC Open Switch 100G Kit contains a 32x100G ports Switch with Broadcom SONIC version pre-installed, F2B, DC PSU + SONIC 40G/100G Maintenance & Support-3 Year (per switch)
<b>SONiC25-3Y-AC-F-US</b>	Ready-to-Plug SONiC Open Switch 25G Kit contains a 48x10G/25G SFP28 +8x100G QSFP28 ports Switch with Broadcom SONIC version pre-installed, F2B, AC PSU + SONIC 25G Maintenance & Support-3 Year (per switch)
<b>SONiC25-3Y-DC-F-US</b>	Ready-to-Plug SONiC Open Switch 25G Kit contains a 48x10G/25G SFP28 + 8x100G QSFP28 ports Switch with Broadcom SONIC version pre-installed, F2B, DC PSU + SONIC 25G Maintenance & Support-3 Year (per switch)
<b>SONiC1-3Y-AC-F-US</b>	Ready-to-Plug SONiC Open Switch 1G Kit contains a 48x1G Copper + 4x10G SFP + Switch with Broadcom SONIC version pre-installed, F2B, AC PSU + SONIC 1G Maintenance & Support-3 Year (per switch)
<b>SONiC1-3Y-DC-F-US</b>	Ready-to-Plug SONiC Open Switch 1G Kit contains a 48x1G Copper + 4x10G SFP + Switch with Broadcom SONIC version pre-installed, F2B, DC PSU + SONIC 1G Maintenance & Support-3 Year (per switch)

### SONiC support services only

Part Number	Description
<b>EN-BRSONIC-1G-L3-3Y</b>	Broadcom SONiC (standard package) Support & Maintenance Level 3 Only 1G-3 Year
<b>EN-BRSONIC-1G-8x5-3Y</b>	Broadcom SONiC (standard package) Support & Maintenance 1G- standard 8x5, 3 Year

<b>EN-BRSONIC-1G-24x7-3Y</b>	Broadcom SONiC (standard package) Support & Maintenance 1G- Premium 24x7, 3 Year
<b>EN-BRSONIC-10G-L3-3Y</b>	Broadcom SONiC (standard package) Support & Maintenance Level 3 Only 10G-3 Year
<b>EN-BRSONIC-10G-8x5-3Y</b>	Broadcom SONiC (standard package) Support & Maintenance 10G- standard 8x5, 3 Year
<b>EN-BRSONIC-10G-24x7-3Y</b>	Broadcom SONiC (standard package) Support & Maintenance 10G- Premium 24x7, 3 Year
<b>EN-BRSONIC-25-L3-3Y</b>	Broadcom SONiC (standard package) Support & Maintenance Level 3 Only 25G-3 Year
<b>EN-BRSONIC-25-8x5-3Y</b>	Broadcom SONiC (standard package) Support & Maintenance 25G- standard 8x5, 3 Year
<b>EN-BRSONIC-25-24x7-3Y</b>	Broadcom SONiC (standard package) Support & Maintenance 25G- Premium 24x7, 3 Year
<b>EN-BRSONIC-100-L3-3Y</b>	Broadcom SONiC (standard package) Support & Maintenance Level 3 Only 100G-3 Year
<b>EN-BRSONIC-100-8x5-3Y</b>	Broadcom SONiC (standard package) Support & Maintenance 100G- standard 8x5, 3 Year
<b>EN-BRSONIC-100-24x7-3Y</b>	Broadcom SONiC (standard package) Support & Maintenance 100G- Premium 24x7, 3 Year
<b>EN-BRSONIC-400-L3-3Y</b>	Broadcom SONiC (standard package) Support & Maintenance Level 3 Only 400G-3 Year
<b>EN-BRSONIC-400-8x5-3Y</b>	Broadcom SONiC (standard package) Support & Maintenance 400G- standard 8x5, 3 Year
<b>EN-BRSONIC-400-24x7-3Y</b>	Broadcom SONiC (standard package) Support & Maintenance 400G- Premium 24x7, 3 Year