DATA SHEET

Infinera GX G30 Series – Compact Modular Optical Transport Solution

Compact modular platforms have seen fast and consistent market adoption by all types of network operators, including internet content providers (ICPs), communication service providers (CSPs), cable/multiple-systems operators (MSOs), research and education network operators, and many others in a wide variety of applications. Infinera's GX G30 Series of compact modular platforms leverages a sled-based architecture and add-as-you-grow operational model to accelerate the deployment of compact modular platforms and unleash their full potential in a wide scope of applications. It offers high capacity and low power consumption in a compact footprint, as well as support for Xponder and open line system (OLS) sleds in a single chassis. The G30 Series enables the latest high-speed coherent DWDM line rates from 100G to 800G and client interfaces from 1 Gb/s to 400 Gb/s, and is perfectly suited for CSPs, ICPs, and many other network operators that require high-capacity networking. Infinera's GX G30 Series products comprise the G30, G31, and G32 chassis variants with a 600-mm-deep form factor and the G34C chassis variant with a 300-mm-deep form factor. All GX G30 Series products support field-replaceable system controllers, while the G32 and G34C chassis also support redundant field-replaceable system controllers.

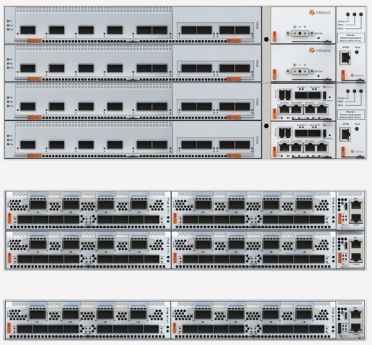
THE BENEFITS OF INFINERA'S GX G30 SERIES COMPACT MODULAR PLATFORMS

The significant business and operational benefits of Infinera's GX G30 Series can be summarized as follows:

- **Multi-generational pay-as-you-grow mode of operation**: The sled-based design allows network operators to eliminate up-front costs and leverage new technologies as they become available. Network operators can add capacity and change configuration through sleds when and how they want to, while scaling horizontally by adding new sleds and vertically through the addition of new chassis in a pay-as-you-grow and power-as-you-grow operational model.
- **Carrier-grade features**: The GX G30 Series is designed to be carrier grade. Key features such as hot-swappable controllers, redundant controllers on G32 and G34C chassis variants, redundant AC/DC power supplies, redundant fans and I/O panels, and standard open APIs allow seamless deployment and integration into ICP and CSP networks.
- **Support for open line system and Xponders**: The GX G30 Series supports both open line system and Xponder (transponder, muxponder, and switchponder) configurations, and operators have the flexibility to utilize both functions. Support for open line system includes fixed OADM and ROADM configurations, including four-, nine-, 12-, and 20-degree ROADMs and colorless, directionless, and contentionless add/drop structures. Xponder sleds support the latest coherent pluggables, including 400G QSFP-DD DCO optics and embedded optical engines. Xponders and line systems can be deployed in the same chassis, providing market-leading network configuration density.

BENEFITS OF THE INFINERA GX SERIES

- **Decrease total cost of ownership** with more capacity at longer reaches, a compact footprint, and low power consumption
- **Maximize ROI** with a sled-based architecture for a multi-generational optical engine
- **Add as you grow** by smoothly adding capacity when and how you want and eliminating the up-front cost of buying all the hardware on day one and the associated CapEx
- **Power as you grow** by seamlessly adding sleds into the system as demand arises
- **Simplify turn-up and lifecycle management** with easy installation, quick service turn-up, and intuitive management
- **Seamlessly integrate** compact modular into your CSP network with numerous carrier-grade features
- **Combine or disaggregate** Xponder and line system functionalities
- **Open your network** with native support for standard open APIs (YANG, OpenConfig, Open ROADM MSA, etc.)
- **Automate** and streamline operations with streaming telemetry and declarative configuration



The Infinera GX G30 Series Compact Modular Platforms G34C, G32, and G31

- **Open and disaggregated principles**: The GX G30 Series is built around the principles of hardware disaggregation, open standards such as Open ROADM MSA, and open APIs with standard YANG OpenConfig data models, which further facilitates multi-vendor interoperability and prevents vendor lock-in.
- **Significantly reduced transport costs**: Infinera builds upon the success of the sled-based architecture by offering a complete portfolio of compact modular platforms that addresses all networking areas, from access, metro, and core to long-haul and submarine networks.
- **Built for automation**: The GX G30 Series supports numerous features and capabilities to automate tasks, streamline operations, and eliminate sources of human error. Such features include declarative configuration management, streaming telemetry (gRPC, gNMI), open APIs, and standards-based YANG models. Support for extensible NOS application agents enhances analytics while enabling better network-wide performance monitoring.

WIDE APPLICATION SCOPE

With its sled-based architecture, carrier-grade features, and variety of chassis types, Infinera's GX G30 Series compact modular platforms can be deployed in a wide variety of applications. These include:

- Installation in ETSI-compliant 600-mm and 800-mm racks for G30, G31, and G32
- Installation in ETSI-compliant 300-mm racks for G34C
- Reducing the cost of optical transport in metro, regional, and long-haul networks
- Expanding network coverage and capacity of existing optical line systems
- Maximizing spectral efficiency in metro, regional, long-haul, and submarine networks for more capacity at longer distances
- Addressing data center interconnect applications regardless of distance
- Utilizing multi-service low-speed service aggregation and switching with OTN ADM and OTN switching sleds
- Introducing cost-effective high-speed 100 GbE/400 GbE client services
- Upgrading metro/regional networks for 5G and DAA
- Enhancing 5G networks with timing transport for SyncE and IEEE 1588 PTP
- Delivering advanced photonic capabilities over open line systems
- Providing next-generation open line system functionality with the smallest footprint and minimal power consumption
  - Fixed OADM applications
  - ROADM C, CD, CDC applications
  - Flexible grid for ultra-high baud rates
  - Super C- + Super L-band
  - Raman amplification

G30

Number of Slots
- 4 single-slot sleds, 2 double-slot sleds, or mixed

Physical Dimensions
- 1RU: 44 mm (H) x 440 mm (W) x 510 mm (D)
- 1RU: 1.732 in (H) x 17.32 in (W) x 20.1 in (D)

Weight
- Common equipment: 3.2 kg/7.1 lbs without sleds

Environmental Characteristics
- Operating temperature: 5° C to 40° C / 41° F to 104° F
- Transport and storage: -40° C to 70° C/-40° F to 158° F/40°C + 93% RH
- Humidity: 5% to 93% non-condensing

Power
- 820 W output capacity
  - DC: -40.5 V – -72 V DC, max 30A
  - AC: 100 V – 127 V AC, max 12A
  - AC: 200 V – 240 V AC, max 9A

G31

Number of Slots
- 4 single-slot sleds, 2 double-slot sleds, or mixed

Physical Dimensions
- 1RU: 44 mm (H) x 440 mm (W) x 500 mm (D)
- 1RU: 1.732 in (H) x 17.32 in (W) x 19.68 in (D)

Weight
- Common equipment: 8.6 kg/18.9 lbs
- Fully filled with double-width module: 15.2 kg/33.5 lbs

Environmental Characteristics
- Normal operating temperature: -5° C to 45°/55° C; 23° F to 122° F
- Operating humidity: 93% maximum

Power
- 1 kW output capacity
  - DC: -36 V – -75 V DC, max 30A
  - AC: 100 V – 127 V AC, max 12A
  - AC: 200 V – 240 V AC, max 9A

G32

Number of Slots
- 8 single-slot sleds, 4 double-slot sleds, or mixed

Physical Dimensions
- 2RU: 88 mm (H) x 441 mm (W) x 500 mm (D)
- 2RU: 3.465 in (H) x 17.36 in (W) x 19.68 in (D)

Weight
- Common equipment: 17.3 kg /38.14 lbs
- Fully filled with double-width module: 44.3 kg/97.66 lbs

Environmental Characteristics
- Normal operating temperature: 0/-5° C to 40°/55° C; 23° F to 131° F
- Operating humidity: 93% maximum

Power
- 2.4 kW output capacity
  - DC: -40 V – -72 V DC
  - AC: 100 V – 127 V AC
  - AC: 200 V – 240 V AC

G34C

Number of Slots
- 8 single-slot sleds, 4 double-slot sleds or mixed

Physical Dimensions
- 4RU: 176 mm (H) x 468 mm (W) x 260 mm (D)
- 4RU: 6.929 in (H) x 18.42 in (W) x 10.24 in (D)

Weight
- Common equipment: 7.2 kg/15.8 lbs

Environmental Characteristics
- Normal operating temperature: 0/-5° C to 40°/55° C; 23° F to 131° F
- Operating humidity: 93% maximum

Power
- DC PSU supports 1.3 kW output capacity
  - -40.5 V to -72 V DC

G30 SERIES

Common Equipment
- Field-replaceable controller
- Redundant/field-replaceable controllers for G32 and G34C
- Redundant/field-replaceable power supply
- Redundant/field-replaceable fan unit
- Power options: AC or DC power

Management and Automation
- CLI, SNMP, Syslog, WebGUI
- Infinera Transcend NMS
- API: NETCONF, gRPC/gNMI, RESTCONF APIs based on
- OpenConfig/IETF and Open ROADM/IETF YANG models in addition to Infinera open API models; streaming telemetry; declarative configuration models; CLI scripting; Python scripts hosted using guest container and shell
- Automation: zero-touch provisioning (ZTP), LLDP, line system integration and automation

Security
- Secure boot, IEEE 802.1AR iDevID, secure key store, secure memory wipe
- L3 ACL, IPsec, NTP authentication
- SSHv2, HTTPS/TLS1.2, AAA, TACACS+, RADIUS, MFA for SSH, SFTP, SCP
- AES-256-GCM wire-speed L1 bulk encryption (line side), IKEv2 with PSK or X.509 certificate option

Regulatory and Compliance
- RoHS-6-compliant and lead-free per Directive 2002/95/EC
- GR-3160-Core Generic Requirements for Telecommunications Data Center Equipment and Spaces
- Telcordia GR-326-Core Generic Requirements for Single-Mode Optical Connectors and Jumper Assemblies
- Telcordia GR-1435-Core Generic Requirements for Multi-Fiber Optical Connectors
- Emissions: FCC Part 15 Class A, EN55022/CISPR Class A Compliant, CE Laser Safety: ANSI Class 1M, IEC Class 1M, EN 60825-1/2, 21 CFR 1040 US FDA CDR, Class 1
- Electrical safety: UL 60950, CSA22.2 60950 and IEC 60950

**Product features and specifications are subject to change*

Infinera