BIG-IP System

WHAT'S INSIDE

Gain Agility with the Most Programmable Cloud-Ready ADC

F5's next-generation, cloud-ready Application Delivery Controller (ADC) platform provides DevOps-like agility with the scale, security depth, and investment protection needed for both established and emerging apps. The new F5® BIG-IP® iSeries appliances deliver quick and easy programmability, ecosystem-friendly orchestration, and record breaking, software-defined hardware performance. As a result, customers can accelerate private clouds and secure critical data at scale while lowering total cost of ownership (TCO) and future proofing their application infrastructure.

KEY BENEFITS

Obtain the lowest TCO
Reduce TCO and the infrastructure footprint by consolidating app and security services on to a unified, high-performance platform.

Protect critical data
Deliver the SSL capacity required to protect critical data—including offload of elliptical curve cryptography (ECC) processing to hardware—enabling forward secrecy scaling. Simplify operations and improve customer confidence with the fastest way to an SSL Labs A+ rating.

Secure applications
Deliver the most effective protection with integrated, one-pass, full stack (L3–L7) security, including an ICSA Certified firewall, high-capacity distributed denial-of-service (DDoS) mitigation, contextual access management, and more.

Ensure the easiest deployment
In cloud or container environments, save time with a simple, out-of-the-box native integration with leading private cloud, interconnects, and container environments.

Maximize investment protection
The iSeries' software-defined hardware includes unique F5 TurboFlex™ FPGA technology that enables on-demand optimized performance for specific use cases such as DDoS protection or UDP traffic processing. Eliminate forklift upgrades and extend the lifecycle of app delivery hardware with software-upgradeable performance.

Maximize uptime
Ensure your critical infrastructure is built on reliable, carrier-grade hardware with hot-swappable components, redundant power supplies and fans, and always-on management integrated with a full baseboard management controller (BMC) with IPMI support.

IPv6 READY

ICSA labs CERTIFIED SSL VPN FIREWALL - CORPORATE WEB APPLICATION FIREWALL

STANDARDIZE YOUR APP DELIVERY SERVICES

BIG-IP ADC appliances can simplify your network and reduce TCO by offloading servers, providing a consistent set of comprehensive application services, and consolidating devices, saving management, power, space, and cooling costs in the data center.

The massive performance and scalability of the BIG-IP platform reduces the number of ADCs needed to deliver even the most demanding applications. By offloading computationally intense processes, you can significantly reduce the number of application servers needed.

INTELLIGENT PERFORMANCE WHERE IT MATTERS

Traditional performance measurements in terms of throughput don't accurately represent the complex needs of delivering modern web applications. Connection capacity and L7 transactions per second are critical. For instance, ADCs must be able to process high levels of layer 4 and layer 7 connections and make application-layer decisions such as removing sensitive information or transforming application-specific payloads. BIG-IP appliances have the intelligence and performance to handle application layer decisions while securing your data and infrastructure.

THE ADVANTAGES OF F5 BIG-IP HARDWARE

The BIG-IP iSeries platform perfectly blends software and hardware innovations that balance the need for performance, scalability, and agility. The F5 TMOS® operating system provides total visibility, flexibility, and control across all application delivery services. With TMOS, organizations can intelligently adapt to the diverse and evolving requirements of applications and networks. Other unique or patented hardware and software innovations enable the BIG-IP iSeries platform to offer unmatched capabilities:

- F5 TurboFlex™ optimization technology: Field-programmable gate arrays (FPGAs), tightly integrated with CPUs, memory, TMOS, and software, provide specific packet-flow optimizations, L4 offload, support for private cloud tunneling protocols, and denial-of-service (DoS) protection. These hardware optimizations not only improve performancebut free CPU capacity for other app delivery and security tasks. Only BIG-IP iSeries appliances feature TurboFlex performance profiles—user-selectable, pre-packaged optimizations that provide different performance characteristics depending on the business need:
    - L4 offload enables unsurpassed throughput and reduced loads on software.
    - Unique per-virtual-IP/application SYN flood protection ensures that if one application is under attack, others are not affected. Only F5 ADCs implement hardware-based SYN cookies in L4 and full proxy L7 mode.

    - More than 100 types of DoS attacks can be detected and mitigated in hardware, hugely increasing the attack size that can be absorbed compared to software-only implementations.
    - Network virtualization and overlay protocol processing (such as VXLAN and NVGRE tunneling) increases traffic processing capacity.
    - UDP traffic processing increases throughput and reduces both latency and jitter, improving VoIP or streaming media performance.
- Best-in-market SSL performance accelerates SSL/TLS adoption by offloading costly SSL processing and speed key exchange and bulk encryption. BIG-IP iSeries solutions include hardware acceleration of ECC ciphers, enabling forward secrecy. In addition, the ability to achieve an SSL Labs A+ rating with a few simple steps reduces SSL configuration complexity and errors.
- BIG-IP platforms offer maximum hardware compression, enabling cost-effective offloading of traffic compression processing to improve page load times and reduce bandwidth utilization.
- Enterprise class SSD (solid state drive) technology on select BIG-IP platforms improves performance and reliability, saves power, and reduces heat generation and noise.
- Efficiency features include 80 Plus Platinum certified power supplies as well as front-panel touchscreen LCD management, remote boot and multi-boot support, and USB support.

F5 ScaleN

F5 ScaleN® technology enables organizations to scale performance, virtualize, or horizontally cluster multiple BIG-IP devices, creating an elastic Application Delivery Networking infrastructure that can efficiently adapt as needs change.

- **On-demand scaling**—Increase capacity and performance with on-demand scaling, simply adding more power to your existing infrastructure instead of adding devices. Some BIG-IP appliance models can be upgraded to the higher performance model within each series through on-demand software licensing, which enables organizations to support growth without new hardware.
- **Operational scaling**—Virtualize ADC services with a multi-tenant architecture that supports a variety of BIG-IP versions and product modules on a single device. F5 Virtual Clustered Multiprocessing™ (vCMP) technology enables select hardware platforms to run multiple BIG-IP guest instances. Each guest instance acts like a physical BIG-IP device, with a dedicated allocation of CPU, memory, and other resources. vCMP offers per-guest rate limiting for bandwidth, enabling different performance levels for each guest.

Further divide each vCMP guest using multi-tenant features such as partitions and route domains, which can isolate configuration and networks on a per-virtual-domain basis. Within each virtual domain, you can further isolate and secure configuration and policies, with a role-based access system for administrative control. When route domains/partitions are combined with vCMP guests, F5 provides the highest density multi-tenant virtualization solution, which can scale to thousands of virtual ADC (vADC) instances. This ability to virtualize BIG-IP ADC services means service providers and enterprise users can isolate based on BIG-IP version, enabling departmental or project-based tenancy as well as performance guarantees, consolidated application delivery platform management, and increased utilization.

- **Application scaling**—Increase capacity by adding BIG-IP resources through an all-active approach, and scale beyond the traditional device pair to eliminate idle and costly standby resources. Application scaling achieves this through two forms of horizontal scale. One is Application Service Clustering, which focuses on application scalability and high availability. The other is Device Service Clustering, designed to efficiently and seamlessly scale BIG-IP application delivery services and sync application policies.

  Application Service Clustering delivers sub-second failover and comprehensive connection mirroring for a highly available cluster of up to eight devices at the application layer, providing highly available multi-tenant deployments. Workloads can be moved across a cluster of devices or virtual instances without interrupting other services and can be scaled to meet business demand.

  Device Service Clustering can synchronize full device configurations in an all-active deployment model, enabling consistent policy deployment and enforcement across devices—up to 32 active nodes. This ensures a consistent device configuration, with syncing of hardened firewall and access policies to simplify operations and reduce attack surfaces.

GAIN AGILITY AND CONTROL IN PRIVATE CLOUDS

Enterprises are migrating to private clouds to achieve agility and speed time to market for applications while maintaining control. Regardless of the chosen cloud stack, typically only basic networking and app services like load balancing are provided. Advanced application delivery and security services are required to optimize and protect applications. Highly scalable BIG-IP platforms, with programmatic interfaces and service delivery templates, enable integration and automation with orchestration systems and deliver right-sized services aligned to specific app needs.

F5 solutions integrate with the leading private cloud technology stacks, including OpenStack, VMware, and Microsoft. For OpenStack, F5 provides native orchestration with Heat templates to automate the end-to-end deployment of advanced app and security services, reducing deployment times from days to minutes. Integration with VMware vRealize Orchestrator through the vRO plug-in reduces configuration time, enables self-service of F5 application services by app owners, and automates complex, multi-step workflows. F5 iWorkflow™ enables integration of F5 devices with software-defined networking (SDN) orchestration systems providing a single point of contact between the orchestrator and F5 devices.

Two-tier architecture

For enterprises deploying a private cloud, a two-tier architecture provides an optimized design that takes best advantage of both hardware and software app delivery services. The first tier provides services such as L4 traffic management, distributed denial-of-service (DDoS) firewall, or SSL offloading, which are centralized and shared for all north-south traffic entering the network, enforcing consistent app policies. These services, which deal with high-volume traffic and incur heavy CPU loads, require high performance, scalability, and guaranteed service-level agreements (SLAs). Dedicated, purpose-built hardware such as BIG-IP iSeries appliances meet those requirements and, depending on the environment and app requirements, can be more cost efficient than commodity servers.

Tier 2—the tenant or app tier—includes emerging, cloud-native applications that can be hosted in containers or disaggregated into microservices. The apps require specific services addressing intra-app traffic (east-west traffic). Those services, which can include basic load balancing to web app firewall or web performance optimizations, can be delivered on a per-application basis through highly scalable, flexible software such as virtual editions of BIG-IP products. This two-tier architecture model, standardized on F5 application services, offers flexibility, a strategic point of control where proven app policies can be enforced, and complete visibility of all traffic, taking advantage of hardware where it's needed and software agility near the app.

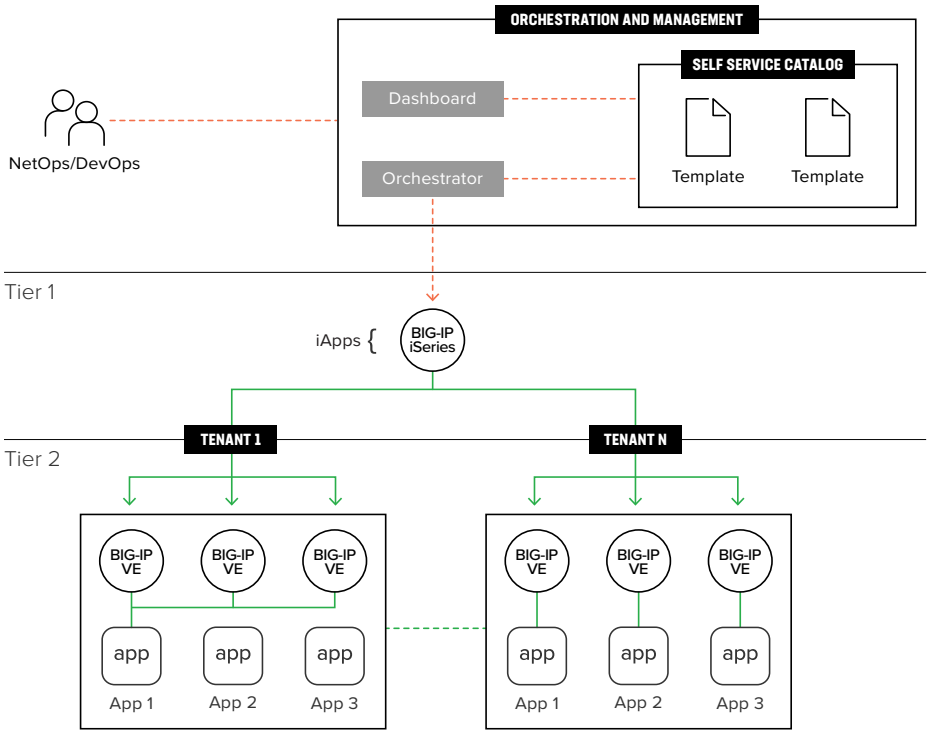

Figure 1: Orchestrated and automated deployment of app services in a two-tier private cloud architecture.

Programmability

Enabling automation and orchestration is key to achieving the benefits of cloud and software-defined architectures and to scaling application services on demand. F5 platforms offer many ways to program the application services fabric and network, enabling organizations to automate deployment, react to events in real time, and easily integrate into orchestration systems. F5 iRules® scripting has long provided granular traffic control and visibility, enabling customization, rapid response to code errors and security vulnerabilities, and support for new protocols. New F5 iRules LX™ lowers costs and speeds deployments by extending iRules to JavaScript developers and providing access to, and easier integration with, over 250,000 community Node.js packages. In addition, with F5 iApps® templates, organizations can automate deployment and configuration of application services in minutes. F5 iControl® REST APIs and SDKs provide integration with leading open source and commercial orchestration systems, VMware, OpenStack clouds, and configuration management systems such as Puppet, Chef, and Ansible.

BIG-IQ Centralized Management

F5 BIG-IQ® Centralized Management is F5's management and orchestration platform. It provides a central point of control for F5 physical and virtual devices and the app delivery and security services that run on them. BIG-IQ Centralized Management is available both as a virtual edition and an F5 appliance. It simplifies management, helps ensure compliance, and gives you the visibility and reporting you need to troubleshoot and respond to issues and security attacks.

BIG-IQ Centralized Management manages policies, licenses, SSL certificates, images, and configurations for F5 devices and the following BIG-IP software modules:

- BIG-IP® Local Traffic Manager™ (LTM)
- BIG-IP® Application Security Manager™ (ASM)
- BIG-IP® Advanced Firewall Manager™ (AFM)
- BIG-IP® Access Policy Manager® (APM)
- F5 Secure Web Gateway Services
- BIG-IP® DNS
- F5 WebSafe™ and F5 MobileSafe® (monitoring only)

BIG-IQ Centralized Management supports BIG-IP appliances, VIPRION chassis/blades, and BIG-IP virtual editions (VE), whether they are running locally or in the cloud. It is ideal for organizations that require central management of F5 devices and modules, license management of BIG-IP VEs, or central reporting and alerting on application availability, performance, and security.

Simplified and enhanced diagnostics and troubleshooting

BIG-IP iSeries appliances include a baseboard management controller (BMC) and support for the Intelligent Platform Management Interface (IPMI) protocol. With the BMC and Always-On Management (AOM) firmware, F5 customers can have deeper access to internal sensor data for system monitoring, including multiple thermal, airflow, and voltage readings. Out-of-band alerts for hardware-level problems are possible without a running TMOS instance. Gain remote system console access to the BMC and AOM functions through the same IP address of the TMOS management port, eliminating the need for a special or separate network. BIG-IP iSeries appliances also can show system information, such as sensor values for troubleshooting, on their color touchscreen LCD displays.

FIPS compliance at scale

The Federal Information Processing Standards (FIPS) specify requirements for cryptographic modules. FIPS compliance is required for many government agencies and industries such as financial services and healthcare that demand the highest standards in information, application, and data security. F5 offers a broad range of FIPS-validated hardware appliances that support FIPS 140-2 Level 2 and FIPS 140-3 Level 2 implementations for RSA cryptographic key generation, use, and protection when running validated versions of BIG-IP TMOS. Current validations and those under test can be viewed here in the “F5 FIPS Cryptographic Modules” section: https://www.f5.com/company/certifications.

For additional protection, the F5 10350v-F/i7820-DF/i5820-DF ship with an embedded 3rd party FIPS-grade internal HSM (PCI card), validated by the Marvell company at FIPS 140-3 Level 3. F5 hardware FIPS appliances include integrated HSMs that have tamper-evident seals with a hardened-epoxy cover which, if removed, will render the card useless. The F5 BIG-IP system is not 140-2 Level 3 validated.

THE BIG-IP ISERIES: F5'S NEXT-GENERATION ADC SOLUTION

The new BIG-IP iSeries solutions unify application delivery for established and emerging apps in data center and cloud environments. The iSeries appliances provide leading performance, control, and versatility. With this platform, enterprises and service providers can efficiently standardize on a single platform to offload SSL processing and deploy comprehensive application and security services anywhere, in any architecture and development model, while reducing TCO. In addition, F5 provides tools such as the F5 iHealth® Upgrade Advisor and BIG-IP Migration Assistant to simplify and guide upgrades to the latest TMOS release or configuration migration to the new iSeries platform.

Specifications	i15800/i15820-DF	i15600/i15600-N
Intelligent Traffic Processing:	L7 requests per second: 10M L4 connections per second: 4.2M L4 HTTP requests per second: 35M Maximum L4 concurrent connections: 300M Throughput: 320 Gbps/160 Gbps L4/L7 (160 Gbps/140 Gbps L4/L7 in i15820-DF)	L7 requests per second: 5M L4 connections per second: 2.4M L4 HTTP requests per second: 28M Maximum L4 concurrent connections: 300M Throughput: 320 Gbps/160 Gbps L4/L7
Hardware Offload SSL/TLS:	ECC†: 100K TPS (250k TPS in i15820-DF) (ECDSA P-256) RSA: 160K TPS (320K TPS in i15820-DF) (2K keys) 50 Gbps bulk encryption (80/100G Gbps bulk encryption (AES-CBC/AES-GCM) in i15820-DF*)	ECC†: 60K TPS (ECDSA P-256) RSA: 80K TPS (2K keys) 50 Gbps bulk encryption*
FIPS SSL:	35K (RSA) in i15820-DF 8.5K (ECDSA P-256) in i15820-DF	N/A
Hardware Compression:	60 Gbps (120 Gbps in i15820-DF)	N/A
Hardware DDoS Protection:	210M SYN cookies per second (105M SYN CPS in i15820-DF)	140M SYN cookies per second
TurboFlex Performance Profiles:	Tier 3 (4x BW)	N/A
Software Compression:	N/A	30 Gbps
Software Architecture:	64-bit TMOS	64-bit TMOS
On-Demand Upgradable:	N/A	Yes
Virtualization (Maximum Number of vCMP Guests):	56 (28 in i15820-DF)	N/A
Processor:	Two 14-Core Intel Xeon processors (total 56 hyperthreaded logical processor cores)	Two 14-Core Intel Xeon processors (total 56 hyperthreaded logical processor cores)
Memory:	512 GB DDR4	512 GB DDR4
Hard Drive:	1x 1.6 TB Enterprise Class SSD (2x 1.6 TB Enterprise Class SSD in i15820-DF)	1x 1.6 TB Enterprise Class SSD
Ethernet and Fiber CU Ports:	N/A	N/A
40 Gigabit Fiber Ports (QSFP+):	8 SR4/LR4 (sold separately) (QSFP+ optical breakout cable assemblies available to convert to 10G ports)	8 SR4/LR4 (sold separately) (QSFP+ optical breakout cable assemblies available to convert to 10G ports)
100 Gigabit Fiber Ports (QSFP28):	4 SR4/LR4 (sold separately) QSFP28	4 SR4/LR4 (sold separately) QSFP28
Power Supply:	2x1500W Platinum AC PSU (i15800) or DC (i15800-N)	2x1500W Platinum AC PSU (i15600) or DC (i15600-N)
Typical Consumption:	885W (dual power supply, 48V DC or 110V AC input)** (815W in i15820-DF)	885W (dual power supply, 48V DC or 110V AC input)**
Input Voltage:	100-240 VAC +/- 10% auto switching, 50/60hz (i15800) -48 to -60 VDC Minimum. Start up voltage: -44 VDC (i15800-N)	100-240 VAC +/- 10% auto switching, 50/60hz (i15600) -48 to -60 VDC Minimum. Start up voltage: -44 VDC (i15600-N)
Typical Heat Output:	3020 BTU/hour (2785 BTU/hour in i15820-DF) (dual power supply, 48V DC or 110V AC input)**	3020 BTU/hour (dual power supply, 48V DC or 110V AC input)**
Dimensions:	3.45" (8.76 cm) H x 17.9" (45.47 cm) W x 30.2" (76.71 cm) D2U industry standard rack-mount chassis	3.45" (8.76 cm) H x 17.9" (45.47 cm) W x 30.2" (76.71 cm) D 2U industry standard rack-mount chassis
Weight:	76 lbs. (34.47 kg) (Dual power supply)	76 lbs. (34.47 kg) (Dual power supply)
Operating Temperature:	32° to 104° F (0° to 40° C)	32° to 104° F (0° to 40° C)
Operational Relative Humidity:	5% to 85% at 40° C	5% to 85% at 40° C
Safety Agency Approval:	ANSI/UL 60950-1-2014*** CSA 60950-1-07, Including A1:2011+A2:2014 IEC 60950-1:2005, A1:2009+A2:2013 EN 60950-1:2006+A11:2009+A1:2010+A12:2011+A2:2013	ANSI/UL 60950-1-2014 CSA 60950-1-07, Including A1:2011+A2:2014 IEC 60950-1:2005, A1:2009+A2:2013 EN 60950-1:2006+A11:2009+A1:2010+A12:2011+A2:2013
Certifications/ Susceptibility Standards:	ETSI EN 300 386 V1.6.1 (2012) EN 55032:2012/AC:2013 Class A; EN 61000-3-2:2014 EN 61000-3-3:2013; As Information Technology Equipment (ITE) Class A per (as applicable): EN 55024:2010 FCC Class A (Part 15), IC Class A, VCCI Class A NEBS Level 3 compliant	ETSI EN 300 386 V1.6.1 (2012) EN 55032:2012 Class A; EN 61000-3-2:2014 EN 61000-3-3:2013; EN 55024:2010 FCC Class A (Part 15), IC Class A, VCCI Class A NEBS Level 3 compliant

Notes: Performance-related numbers are based on local traffic management services only. Only optics provided by F5 are supported.

*Maximum throughput.

**Please refer to the Platform Guide: i15000 Series for the latest power ratings for your specific configurations (number of PS, highline input voltage, DC, etc.).

***This equipment complies with these requirements of the Low Voltage Directive 2014/35/EU:EC Type Examination Certificates: Master Contract 252302 CB Scheme

†ECDHE-ECDSA-AES128-SHA256 cipher string tested.

Specifications	i11800	i11600
Intelligent Traffic Processing:	L7 requests per second: 5.5M L4 connections per second: 2.1M L4 HTTP requests per second: 25M Maximum L4 concurrent connections: 140M Throughput: 160 Gbps/80 Gbps L4/L7	L7 requests per second: 2.5M L4 connections per second: 1.1M L4 HTTP requests per second: 22M Maximum L4 concurrent connections: 140M Throughput: 160 Gbps/80 Gbps L4/L7
Hardware Offload SSL/TLS:	ECC†: 48K TPS (ECDSA P-256) RSA: 80K TPS (2K keys) 40 Gbps bulk encryption*	ECC†: 30K TPS (ECDSA P-256) RSA: 37K TPS (2K keys) 40 Gbps bulk encryption*
FIPS SSL:	N/A	N/A
Hardware Compression:	40 Gbps	N/A
Hardware DDoS Protection:	130M SYN cookies per second	70M SYN cookies per second
TurboFlex Performance Profiles:	Tier 3 (2x bandwidth)	N/A
Software Compression:	N/A	25 Gbps
Software Architecture:	64-bit TMOS	64-bit TMOS
On-Demand Upgradable:	N/A	Yes
Virtualization (Maximum Number of vCMP Guests):	32	N/A
Processor:	One 18-Core Intel Xeon processor (total 36 hyperthreaded logical processor cores)	One 18-Core Intel Xeon processor (total 36 hyperthreaded logical processor cores)
Memory:	256 GB DDR4	256 GB DDR4
Hard Drive:	1x 960 GB Enterprise Class SSD	1x 960 GB Enterprise Class SSD
Gigabit Ethernet CU Ports:	Optional SFP	Optional SFP
Gigabit Fiber Ports (SFP):	Optional SFP+ (SX or LX)	Optional SFP (SX or LX)
10 Gigabit Fiber Ports (SFP+):	8 SR/LR (sold separately); optional 10G copper direct attach	8 SR/LR (sold separately); Optional 10G copper direct attach
40 Gigabit Fiber Ports (QSFP+):	6 SR4/LR4 (sold separately); QSFP + optical breakout cable assemblies available to convert to 10 gigabit ports	6 SR4/LR4 (sold separately) (QSFP+ optical breakout cable assemblies available to convert to 10G ports)
Power Supply:	2x 650W Platinum AC PSU (2x 650W DC PSU Optional)	2x 650W Platinum AC PSU (2x 650W DC PSU Optional)
Typical Consumption:	455W (dual power supply, 110V input)**	455W (dual power supply, 110V input)**
Input Voltage:	100–240 VAC +/- 10% auto switching, 50/60hz	100–240 VAC +/- 10% auto switching, 50/60hz
Typical Heat Output:	1555 BTU/hour (dual power supply, 110V input)**	1555 BTU/hour (dual power supply, 110V input)**
Dimensions:	1.72" (4.37 cm) H x 17.4" (44.2 cm) W x 30.6" (77.72 cm) D 1U industrial standard rack-mount chassis	1.72" (4.37 cm) H x 17.4" (44.2 cm) W x 30.6" (77.72 cm) D 1U industry standard rack-mount chassis
Weight:	36 lbs. (16.3 kg) (dual power supply)	36 lbs. (16.3 kg) (Dual power supply)
Operating Temperature:	32° to 104° F (0° to 40° C)	32° to 104° F (0° to 40° C)
Operational Relative Humidity:	5% to 85% at 40° C	5% to 85% at 40° C
Safety Agency Approval:	ANSI/UL 60950-1-2014 CSA 60950-1-07, including A1:2011+A2:2014 IEC 60950-1:2005, A1:2009+A2:2013 EN 60950-1:2006+A11:2009+A1:2010+A12:2011+A2:2013	ANSI/UL 60950-1-2014 CSA 60950-1-07, including A1:2011+A2:2014 IEC 60950-1:2005, A1:2009+A2:2013 EN 60950-1:2006+A11:2009+A1:2010+A12:2011+A2:2013
Certifications/ Susceptibility Standards:	ETSI EN 300 386 V1.6.1 (2012) EN 55032:2012 Class A; EN 61000-3-2:2014 EN 61000-3-3:2013; EN 55024:2010 FCC Class A (Part 15), IC Class A, VCCI Class A	ETSI EN 300 386 V1.6.1 (2012) EN 55032:2012 Class A; EN 61000-3-2:2014 EN 61000-3-3:2013; EN 55024:2010 FCC Class A (Part 15), IC Class A, VCCI Class A

Notes: Performance-related numbers are based on local traffic management services only. Only optics provided by F5 are supported.
SFP+ ports in i11800, i11600, i10800, i10600, i7800, i7600, i5800, and i5600 are compatible with F5 SFP modules.

*Maximum throughput.

**Please refer to the Platform Guide: i5000/i7000/i10000/i11000 Series for the latest power ratings for your specific configurations (number of PS, highline input voltage, DC, etc.).

†ECDHE-ECDSA-AES128-SHA256 cipher string tested.

Specifications	i10800	i10600
Intelligent Traffic Processing:	L7 requests per second: 3.5M L4 connections per second: 1.5M L4 HTTP requests per second: 22M Maximum L4 concurrent connections: 100M Throughput: 160 Gbps/80 Gbps L4/L7	L7 requests per second: 2.1M L4 connections per second: 1M L4 HTTP requests per second: 11M Maximum L4 concurrent connections: 100M Throughput: 160 Gbps/80 Gbps L4/L7
Hardware Offload SSL/TLS:	ECC†: 48K TPS (ECDSA P-256) RSA: 80K TPS (2K keys) 40 Gbps bulk encryption*	ECC†: 30K TPS (ECDSA P-256) RSA: 37K TPS (2K keys) 40 Gbps bulk encryption*
FIPS SSL:	N/A	N/A
Hardware Compression:	40 Gbps	N/A
Hardware DDoS Protection:	130M SYN cookies per second	70M SYN cookies per second
TurboFlex Performance Profiles:	Tier 3 (2x bandwidth)	N/A
Software Compression:	N/A	25 Gbps
Software Architecture:	64-bit TMOS	64-bit TMOS
On-Demand Upgradable:	N/A	Yes
Virtualization (Maximum Number of vCMP Guests):	16	N/A
Processor:	One 8-Core Intel Xeon processor (total 16 hyperthreaded logical processor cores)	One 8-Core Intel Xeon processor (total 16 hyperthreaded logical processor cores)
Memory:	128 GB DDR4	128 GB DDR4
Hard Drive:	1x 480 GB Enterprise Class SSD Model with dual SSDs in RAID 1 also available	1x 480 GB Enterprise Class SSD Model with dual SSDs in RAID 1 also available
Gigabit Ethernet CU Ports:	Optional SFP	Optional SFP
Gigabit Fiber Ports (SFP):	Optional SFP+ (SX or LX)	Optional SFP+ (SX or LX)
10 Gigabit Fiber Ports (SFP+):	8 SR/LR (sold separately); optional 10G copper direct attach	8 SR/LR (sold separately); optional 10G copper direct attach
40 Gigabit Fiber Ports (QSFP+):	6 SR4/LR4 (sold separately); QSFP + optical breakout cable assemblies available to convert to 10 gigabit ports	6 SR4/LR4 (sold separately) (QSFP+ optical breakout cable assemblies available to convert to 10 gigabit ports)
Power Supply:	2x 650W Platinum AC PSU (2x 650W DC PSU Option)	2x 650W Platinum AC PSU (2x 650W DC PSU Option)
Typical Consumption:	415W (dual power supply, 110V input)**	415W (dual power supply, 110V input)**
Input Voltage:	100–240 VAC +/- 10% auto switching, 50/60hz	100-240 VAC +/- 10% auto switching, 50/60hz
Typical Heat Output:	1420 BTU/hour (dual power supply, 110V input)**	1420 BTU/hour (dual power supply, 110V input)**
Dimensions:	1.72" (4.37 cm) H x 17.4" (44.2 cm) W x 30.6" (77.72 cm) D 1U industrial standard rack-mount chassis	1.72" (4.37 cm) H x 17.4" (44.2 cm) W x 30.6" (77.72 cm) D 1U industrial standard rack-mount chassis
Weight:	36 lbs. (16.3 kg) (dual power supply)	36 lbs. (16.3 kg) (dual power supply)
Operating Temperature:	32° to 104° F (0° to 40° C)	32° to 104° F (0° to 40° C)
Operational Relative Humidity:	5% to 85% at 40° C	5% to 85% at 40° C
Safety Agency Approval:	ANSI/UL 60950-1-2014 CSA 60950-1-07, including A1:2011+A2:2014 IEC 60950-1:2005, A1:2009+A2:2013 EN 60950-1:2006+A11:2009+A1:2010+A12:2011+A2:2013	ANSI/UL 60950-1-2014 CSA 60950-1-07, including A1:2011+A2:2014 IEC 60950-1:2005, A1:2009+A2:2013 EN 60950-1:2006+A11:2009+A1:2010+A12:2011+A2:2013
Certifications/ Susceptibility Standards:	ETSI EN 300 386 V1.6.1 (2012) EN 55032:2012 Class A; EN 61000-3-2:2014 EN 61000-3-3:2013; EN 55024:2010 FCC Class A (Part 15), IC Class A, VCCI Class A	ETSI EN 300 386 V1.6.1 (2012) EN 55032:2012 Class A; EN 61000-3-2:2014 EN 61000-3-3:2013; EN 55024:2010 FCC Class A (Part 15), IC Class A, VCCI Class A

Notes: Performance-related numbers are based on local traffic management services only. Only optics provided by F5 are supported.
SFP+ ports in i11800, i11600, i10800, i10600, i7800, i7600, i5800, and i5600 are compatible with F5 SFP modules.

*Maximum throughput.

**Please refer to the Platform Guide: i5000/i7000/i10000/i11000 Series for the latest power ratings for your specific configurations (number of PS, highline input voltage, DC, etc.).

†ECDHE-ECDSA-AES128-SHA256 cipher string tested.

Specifications	i7800	i7600
Intelligent Traffic Processing:	L7 requests per second: 3M L4 connections per second: 1.1M L4 HTTP requests per second: 14M Maximum L4 concurrent connections: 80M Throughput: 80 Gbps/40 Gbps	L7 requests per second: 1.8M L4 connections per second: 750K L4 HTTP requests per second: 7M Maximum L4 concurrent connections: 80M Throughput: 80 Gbps/40 Gbps L4/L7
Hardware Offload SSL/TLS:	ECC†: 25K TPS (ECDSA P-256) RSA: 40K TPS (2K keys) 20 Gbps bulk encryption*	ECC†: 15K TPS (ECDSA P-256) RSA: 22K TPS (2K keys) 20 Gbps bulk encryption*
FIPS SSL:	N/A	N/A
Hardware Compression:	20 Gbps	N/A
Hardware DDoS Protection:	70M SYN cookies per second	50M SYN cookies per second
TurboFlex Performance Profiles:	Tier 3	N/A
Software Compression:	N/A	12 Gbps
Software Architecture:	64-bit TMOS	64-bit TMOS
On-Demand Upgradable:	N/A	Yes
Virtualization (Maximum Number of vCMP Guests):	12	N/A
Processor:	One 6-Core Intel Xeon processor (total 12 hyperthreaded logical processor cores)	One 6-Core Intel Xeon processor (total 12 hyperthreaded logical processor cores
Memory:	96 GB DDR4	96 GB DDR4
Hard Drive:	1x 480 GB Enterprise Class SSD Model with Dual SSDs in RAID 1 also available	1x 480 GB Enterprise Class SSD Model with Dual SSDs in RAID 1 also available
Gigabit Ethernet CU Ports:	Optional SFP	Optional SFP
Gigabit Fiber Ports (SFP):	Optional SFP+ (SX or LX)	Optional SFP+ (SX or LX)
10 Gigabit Fiber Ports (SFP+):	8 SR/LR (sold separately); optional 10G copper direct attach	8 SR/LR (sold separately); optional 10G copper direct attach
40 Gigabit Fiber Ports (QSFP+):	4 SR4/LR4 (sold separately) (QSFP+ optical breakout cable assemblies available to convert to 10G ports)	4 SR4/LR4 (sold separately) (QSFP+ optical breakout cable assemblies available to convert to 10G ports)
Power Supply:	2x 650W Platinum AC PSU (2x 650W DC PSU Option)	2x 650W Platinum AC PSU (2x 650W DC PSU Option)
Typical Consumption:	310W (dual power supply, 110V input)**	310W (dual power supply, 110V input)**
Input Voltage:	100-240 VAC +/- 10% auto switching, 50/60hz	100-240 VAC +/- 10% auto switching, 50/60hz
Typical Heat Output:	1060 BTU/hour (dual power supply, 110V input)**	1060 BTU/hour (dual power supply, 110V input)**
Dimensions:	1.72" (4.37 cm) H x 17.4" (44.2 cm) W x 30.6" (77.72 cm) D 1U industry standard rack-mount chassis	1.72" (4.37 cm) H x 17.4" (44.2 cm) W x 30.6" (77.72 cm) D 1U industry standard rack-mount chassis
Weight:	30 lbs. (13.6 kg) (dual power supply)	30 lbs. (13.6 kg) (dual power supply)
Operating Temperature:	32° to 104° F (0° to 40° C)	32° to 104° F (0° to 40° C)
Operational Relative Humidity:	5% to 85% at 40° C	5% to 85% at 40° C
Safety Agency Approval:	ANSI/UL 60950-1-2014 CSA 60950-1-07, including A1:2011+A2:2014 IEC 60950-1:2005, A1:2009+A2:2013 EN 60950-1:2006+A11:2009+A1:2010+A12:2011+A2:2013	ANSI/UL 60950-1-2014 CSA 60950-1-07, including A1:2011+A2:2014 IEC 60950-1:2005, A1:2009+A2:2013 EN 60950-1:2006+A11:2009+A1:2010+A12:2011+A2:2013
Certifications/ Susceptibility Standards:	ETSI EN 300 386 V1.6.1 (2012) EN 55032:2012 Class A; EN 61000-3-2:2014 EN 61000-3-3:2013; EN 55024:2010 FCC Class A (Part 15), IC Class A, VCCI Class A	ETSI EN 300 386 V1.6.1 (2012) EN 55032:2012 Class A; EN 61000-3-2:2014 EN 61000-3-3:2013; EN 55024:2010 FCC Class A (Part 15), IC Class A, VCCI Class A

Notes: Performance-related numbers are based on local traffic management services only. Only optics provided by F5 are supported.
SFP+ ports in i10800, i10600, i7800, i7600, i5800, and i5600 are compatible with F5 SFP modules.

*Maximum throughput.

**Please refer to the Platform Guide: i5000/i7000/i10000/i11000 Series for the latest power ratings for your specific configurations (SSL, SSD, highline input voltage, DC, etc.).

†ECDHE-ECDSA-AES128-SHA256 cipher string tested.

Specifications	i5800	i5600
Intelligent Traffic Processing:	L7 requests per second: 1.8M L4 connections per second: 800K L4 HTTP requests per second: 12M Maximum L4 concurrent connections: 40M Throughput: 60 Gbps/35 Gbps L4/L7	L7 requests per second: 1.1M L4 connections per second: 500K L4 HTTP requests per second: 6M Maximum L4 concurrent connections: 40M Throughput: 60 Gbps/35 Gbps L4/L7
Hardware Offload SSL/TLS:	ECC†: 20K TPS (ECDSA P-256) RSA: 35K TPS (2K keys) 20 Gbps bulk encryption*	ECC†: 13K TPS (ECDSA P-256) RSA: 20K TPS (2K keys) 15 Gbps bulk encryption*
FIPS SSL:	N/A	N/A
Hardware Compression:	20 Gbps	N/A
Hardware DDoS Protection:	50M SYN cookies per second	25M SYN cookies per second
TurboFlex Performance Profiles:	Tier 3	N/A
Software Compression:	N/A	12 Gbps
Software Architecture:	64-bit TMOS	64-bit TMOS
On-Demand Upgradable:	N/A	Yes
Virtualization (Maximum Number of vCMP Guests):	8	N/A
Processor:	One 4-Core Intel Xeon processor (total 8 hyperthreaded logical processing cores)	One 4-Core Intel Xeon processor (total 8 hyperthreaded logical processor cores)
Memory:	48 GB DDR4	48 GB DDR4
Hard Drive:	1x 480 GB Enterprise Class SSD	1x 480 GB Enterprise Class SSD
Gigabit Ethernet CU Ports:	Optional SFP	Optional SFP
Gigabit Fiber Ports (SFP):	Optional SFP+ (SX or LX)	Optional SFP+ (SX or LX)
10 Gigabit Fiber Ports (SFP+):	8 SR or LR (sold separately); Optional 10G copper direct attach	8 SR or LR (sold separately); Optional 10G copper direct attach
40 Gigabit Fiber Ports (QSFP+):	4 SR4/LR4 (sold separately) (QSFP+ optical breakout cable assemblies available to convert to 10G ports)	4 SR4/LR4 (sold separately) (QSFP+ optical breakout cable assemblies available to convert to 10G ports)
Power Supply:	1x 650W Platinum AC PSU (Additional PSU optional, 2x 650W DC PSU Option)	1x 650W Platinum AC PSU (Additional PSU optional, 2x 650W DC PSU Option)
Typical Consumption:	265W (single power supply, 110V input)**	265W (single power supply, 110V input)**
Input Voltage:	100-240 VAC +/- 10% auto switching, 50/60hz	100-240 VAC +/- 10% auto switching, 50/60hz
Typical Heat Output:	905 BTU/hour (single power supply, 110V input)**	905 BTU/hour (single power supply, 110V input)**
Dimensions:	1.72" (4.37 cm) H x 17.4" (44.2 cm) W x 30.6" (77.72 cm) D 1U industry standard rack-mount chassis	1.72" (4.37 cm) H x 17.4" (44.2 cm) W x 30.6" (77.72 cm) D 1U industry standard rack-mount chassis
Weight:	26 lbs. (11.8 kg) (dual power supply)	26 lbs. (11.8 kg) (dual power supply)
Operating Temperature:	32° to 104° F (0° to 40° C)	32° to 104° F (0° to 40° C)
Operational Relative Humidity:	5% to 85% at 40° C	5% to 85% at 40° C
Safety Agency Approval:	ANSI/UL 60950-1-2014 CSA 60950-1-07, including A1:2011+A2:2014 IEC 60950-1:2005, A1:2009+A2:2013 EN 60950-1:2006+A11:2009+A1:2010+A12:2011+A2:2013	ANSI/UL 60950-1-2014 CSA 60950-1-07, including A1:2011+A2:2014 IEC 60950-1:2005, A1:2009+A2:2013 EN 60950-1:2006+A11:2009+A1:2010+A12:2011+A2:2013
Certifications/ Susceptibility Standards:	ETSI EN 300 386 V1.6.1 (2012); EN 55032:2012 Class A; EN 61000-3-2:2014; EN 61000-3-3:2013; EN 55024:2010; FCC Class A (Part 15), IC Class A; VCCI Class A	ETSI EN 300 386 V1.6.1 (2012); EN 55032:2012 Class A EN 61000-3-2:2014; EN 61000-3-3:2013 EN 55024:2010 FCC Class A (Part 15); IC Class A; VCCI Class A

Notes: Performance-related numbers are based on local traffic management services only. Only optics provided by F5 are supported.
SFP+ ports in i10800, i10600, i7800, i7600, i5800, and i5600 are compatible with F5 SFP modules.

*Maximum throughput.

**Please refer to the Platform Guide: i5000/i7000/i10000/i11000 Series for the latest power ratings for your specific configurations (SSL, SSD, highline input voltage, DC, etc.).

†ECDHE-ECDSA-AES128-SHA256 cipher string tested.

Specifications	i4800	i4600
Intelligent Traffic Processing:	L7 requests per second: 1.1M L4 connections per second: 450K L4 HTTP requests per second: 2M Maximum L4 concurrent connections: 28M Throughput: 20 Gbps L4/L7	L7 requests per second: 650K L4 connections per second: 250K L4 HTTP requests per second: 1M Maximum L4 concurrent connections: 28M Throughput: 20 Gbps L4/L7
Hardware Offload SSL/TLS:	ECC†: 10K TPS (ECDSA P-256) RSA: 20K TPS (2K keys) 15 Gbps bulk encryption*	ECC†: 6.5K TPS (ECDSA P-256) RSA: 10K TPS (2K keys) 10 Gbps bulk encryption*
FIPS SSL:	N/A	N/A
Hardware Compression:	10 Gbps	N/A
Hardware DDoS Protection:	N/A	N/A
TurboFlex Performance Profiles:	Tier 2	N/A
Software Compression:	N/A	6 Gbps
Software Architecture:	64-bit TMOS	64-bit TMOS
On-Demand Upgradable:	N/A	Yes
Virtualization (Maximum Number of vCMP Guests):	N/A	N/A
Processor:	One 4-Core Intel Xeon processor (total 8 hyperthreaded logical processor cores)	One 4-Core Intel Xeon processor (total 8 hyperthreaded logical processor cores)
Memory:	32 GB DDR4	32 GB DDR4
Hard Drive:	1 TB Enterprise Class HDD	1 TB Enterprise Class HDD
Gigabit Ethernet CU Ports:	Optional SFP	Optional SFP
Gigabit Fiber Ports (SFP):	8 SX or LX (sold separately)	8 SX or LX (sold separately)
10 Gigabit Fiber Ports (SFP+):	4 SR/LR (sold separately); optional 10G copper direct attach	4 SR/LR (sold separately); optional 10G copper direct attach
40 Gigabit Fiber Ports (QSFP+):	N/A	N/A
Power Supply:	1x 250W Platinum AC PSU (Additional PSU optional, 2x 650W DC PSU Option)	1x 250W Platinum AC PSU (Additional PSU optional, 2x 650W DC PSU Option)
Typical Consumption:	130W (single power supply, 110V input)**	130W (single power supply, 110V input)**
Input Voltage:	100-240 VAC +/- 10% auto switching, 50/60hz	100-240 VAC +/- 10% auto switching, 50/60hz
Typical Heat Output:	445 BTU/hour (single power supply, 110V input)**	445 BTU/hour (single power supply, 110V input)**
Dimensions:	1.72" (4.37 cm) H x 17.4" (44.2 cm) W x 22.5" (57.15 cm) D 1U industry standard rack-mount chassis	1.72" (4.37 cm) H x 17.4" (44.2 cm) W x 22.5" (57.15 cm) D 1U industry standard rack-mount chassis
Weight:	20 lbs. (9.07 kg) (single power supply)	20 lbs. (9.07 kg) (single power supply)
Operating Temperature:	32°F to 104°F	32°F to 104°F
Operational Relative Humidity:	5% to 85% at 40° C	5% to 85% at 40° C
Safety Agency Approval:	ANSI/UL 60950-1-2014 CSA 60950-1-07, including A1:2011+A2:2014 IEC 60950-1:2005, A1:2009+A2:2013 EN 60950-1:2006+A11:2009+A1:2010+A12:2011+A2:2013	ANSI/UL 60950-1-2014 CSA 60950-1-07, including A1:2011+A2:2014 IEC 60950-1:2005, A1:2009+A2:2013 EN 60950-1:2006+A11:2009+A1:2010+A12:2011+A2:2013
Certifications/ Susceptibility Standards:	ETSI EN 300 386 V1.6.1 (2012) EN 55032:2012 Class A; EN 61000-3-2:2014 EN 61000-3-3:2013; EN 55024:2010 FCC Class A (Part 15), IC Class A, VCCI Class A	ETSI EN 300 386 V1.6.1 (2012) EN 55032:2012 Class A; EN 61000-3-2:2014 EN 61000-3-3:2013; EN 55024:2010 FCC Class A (Part 15), IC Class A, VCCI Class A

Notes: Performance-related numbers are based on local traffic management services only. Only optics provided by F5 are supported.

*Maximum throughput.

**Please refer to the Platform Guide: i2000/i4000 Series for the latest power ratings for your specific configurations (SSL, SSD, highline input voltage, DC, etc.).

†ECDHE-ECDSA-AES128-SHA256 cipher string tested.

Specifications	i2800	i2600
Intelligent Traffic Processing:	L7 requests per second: 650K L4 connections per second: 250K L4 HTTP requests per second: 1M Maximum L4 concurrent connections: 14M Throughput: 10 Gbps L4/L7	L7 requests per second: 350K L4 connections per second: 125K L4 HTTP requests per second: 600K Maximum L4 concurrent connections: 14M Throughput: 10 Gbps L4/L7
Hardware Offload SSL/TLS:	ECC†: 3.5K TPS (ECDSA P-256) RSA: 4.3K TPS (2K keys) 8 Gbps bulk encryption*	ECC†: 2.1K TPS (ECDSA P-256) RSA: 2.5K TPS (2K keys) 5 Gbps bulk encryption*
FIPS SSL:	N/A	N/A
Hardware Compression:	5 Gbps	N/A
Hardware DDoS Protection:	N/A	N/A
TurboFlex Performance Profiles	Tier 1	N/A
Software Compression:	N/A	3 Gbps
Software Architecture:	64-bit TMOS	64-bit TMOS
On-Demand Upgradable:	N/A	Yes
Virtualization (Maximum Number of vCMP Guests):	N/A	N/A
Processor:	One 2-Core Intel Pentium processor (total 4 hyperthreaded logical processor cores)	One 2-Core Intel Pentium processor (total 4 hyperthreaded logical processor cores)
Memory:	16 GB DDR4	16 GB DDR4
Hard Drive:	1 TB Enterprise Class HDD	1 TB Enterprise Class HDD
Gigabit Ethernet CU Ports:	Optional SFP	Optional SFP
Gigabit Fiber Ports (SFP):	4 SX or LX (sold separately)	4 SX or LX (sold separately)
10 Gigabit Fiber Ports (SFP+):	2 SR or LR (sold separately); Optional 10G copper direct attach	2 SR/LR (sold separately); optional 10G copper direct attach
40 Gigabit Fiber Ports (QSFP+):	N/A	N/A
Power Supply:	1x 250W Platinum AC PSU (Additional PSU optional, 2x 650W DC PSU Option)	1x 250W Platinum AC PSU (Additional PSU optional, 2x 650W DC PSU Option)
Typical Consumption:	95W (single power supply, 110V input)**	95W (single power supply, 110V input)**
Input Voltage:	100–240 VAC +/- 10% auto switching, 50/60hz	100-240 VAC +/- 10% auto switching, 50/60hz
Typical Heat Output:	325 BTU/hour (single power supply, 110V input)**	325 BTU/hour (single power supply, 110V input)**
Dimensions:	1.72" (4.37 cm) H x 17.4" (44.2 cm) W x 22.5" (57.15 cm) D 1U industry standard rack-mount chassis	1.72" (4.37 cm) H x 17.4" (44.2 cm) W x 22.5" (57.15 cm) D 1U industry standard rack-mount chassis
Weight:	20 lbs. (9.07 kg) (single power supply)	20 lbs. (9.07 kg) (single power supply)
Operating Temperature:	32°F to 104°F	32°F to 104°F
Operational Relative Humidity:	5% to 85% at 40° C	5% to 85% at 40° C
Safety Agency Approval:	ANSI/UL 60950-1-2014 CSA 60950-1-07, including A1:2011+A2:2014 IEC 60950-1:2005, A1:2009+A2:2013 EN 60950-1:2006+A11:2009+A1:2010+A12:2011+A2:2013	ANSI/UL 60950-1-2014 CSA 60950-1-07, including A1:2011+A2:2014 IEC 60950-1:2005; A1:2009+A2:2013 EN 60950-1:2006+A11:2009+A1:2010+A12:2011+A2:2013
Certifications/ Susceptibility Standards:	ETSI EN 300 386 V1.6.1 (2012) EN 55032:2012 Class A: EN 61000-3-2:2014 EN 61000-3-3:2013: EN 55024:2010 FCC Class A (Part 15), IC Class A, VCCI Class A	ETSI EN 300 386 V1.6.1 (2012) EN 55032:2012 Class A; EN 61000-3-2:2014 EN 61000-3-3:2013; EN 55024:2010 FCC Class A (Part 15), IC Class A, VCCI Class A

Notes: Performance-related numbers are based on local traffic management services only. Only optics provided by F5 are supported.

*Maximum throughput.

**Please refer to the Platform Guide: i2000 for the latest power ratings for your specific configurations (SSL, SSD, highline input voltage, DC, etc.).

†ECDHE-ECDSA-AES128-SHA256 cipher string tested.

Specifications	i11800-DS	i11600-DS
Intelligent Traffic Processing:	L7 requests per second: 5.5M L4 connections per second: 2.1M L4 HTTP requests per second: 25M Maximum L4 concurrent connections: 140M Throughput: 80 Gbps/70 Gbps L4/L7	L7 requests per second: 2.5M L4 connections per second: 1.2M L4 HTTP requests per second: 13M Maximum L4 concurrent connections: 140M Throughput: 80 Gbps/70 Gbps L4/L7
Hardware Offload SSL/TLS:	ECC†: 200K TPS (ECDSA P-256) RSA: 280K TPS (2K keys) 70 Gbps bulk encryption*	ECC†: 100K TPS (ECDSA P-256) RSA: 135K TPS (2K keys) 40 Gbps bulk encryption*
FIPS SSL:	N/A	N/A
Hardware Compression:	70 Gbps	70 Gbps
Hardware DDoS Protection:	130M SYN cookies per second	130M SYN cookies per second
TurboFlex Performance Profiles	Tier 3	Tier 3
Software Compression:	N/A	N/A
Software Architecture:	64-bit TMOS	64-bit TMOS
On-Demand Upgradable:	N/A	N/A
Virtualization (Maximum Number of vCMP Guests)	16	12
Processor:	One 18-Core Intel Xeon processor*** (total 36 hyperthreaded logical processor cores)	One 18-Core Intel Xeon processor*** (total 36 hyperthreaded logical processor cores)
vCPU Numbers:	32 vCPUs	24 vCPUs
Memory:	256 GB DDR4	256 GB DDR4
Hard Drive:	Dual SSD 2x 960GB Enterprise Class SSD	Dual SSD 2x 960GB Enterprise Class SSD
Gigabit Ethernet CU Ports:	Optional SFP	Optional SFP
Gigabit Fiber Ports (SFP):	Optional SFP+ (SX or LX)	Optional SFP+ (SX or LX)
10 Gigabit Fiber Ports (SFP+):	8 SR/LR (sold separately); optional 10G copper direct attach	8 SR/LR (sold separately); optional 10G copper direct attach
40 Gigabit Fiber Ports (QSFP+):	6 SR4/LR4 (sold separately); QSFP + optical breakout cable assemblies available to convert to 10 gigabit ports	6 SR4/LR4 (sold separately); QSFP + optical breakout cable assemblies available to convert to 10 gigabit ports
Power Supply:	2x 650W Platinum AC PSU (2x 650W DC PSU Optional)	2x 650W Platinum AC PSU (2x 650W DC PSU Optional)
Typical Consumption:	455W (dual power supply, 110V input)**	455W (dual power supply, 110V input)**
Input Voltage:	100–240 VAC +/- 10% auto switching, 50/60hz	100–240 VAC +/- 10% auto switching, 50/60hz
Typical Heat Output:	1485 BTU/hour (dual power supply, 110V input)**	1485 BTU/hour (dual power supply, 110V input)**
Dimensions:	1.72" (4.37 cm) H x 17.4" (44.2 cm) W x 30.6" (77.72 cm) D 1U industrial standard rack-mount chassis	1.72" (4.37 cm) H x 17.4" (44.2 cm) W x 30.6" (77.72 cm) D 1U industrial standard rack-mount chassis
Weight:	36 lbs. (16.3 kg) (dual power supply)	36 lbs. (16.3 kg) (dual power supply)
Operating Temperature:	32° to 104° F (0° to 40° C)	32° to 104° F (0° to 40° C)
Operational Relative Humidity:	5% to 85% at 40° C	5% to 85% at 40° C
Safety Agency Approval:	ANSI/UL 60950-1-2014 CSA 60950-1-07, including A1:2011+A2:2014 IEC 60950-1:2005, A1:2009+A2:2013 EN 60950-1:2006+A11:2009+A1:2010+A12:2011+A2:2013	ANSI/UL 60950-1-2014 CSA 60950-1-07, including A1:2011+A2:2014 IEC 60950-1:2005, A1:2009+A2:2013 EN 60950-1:2006+A11:2009+A1:2010+A12:2011+A2:2013
Certifications/ Susceptibility Standards:	ETSI EN 300 386 V1.6.1 (2012); EN 55032:2012/AC:2013 EN 55032:2012 Class A; EN 61000-3-2:2014 EN 61000-3-3:2013; EN 55024:2010 FCC Class A (Part 15), IC Class A, VCCI Class A	ETSI EN 300 386 V1.6.1 (2012); EN 55032:2012/AC:2013 EN 55032:2012 Class A; EN 61000-3-2:2014 EN 61000-3-3:2013; EN 55024:2010 FCC Class A (Part 15), IC Class A, VCCI Class A

Notes: Performance-related numbers are based on local traffic management services only. Only optics provided by F5 are supported.
SFP+ ports in i11800, i11600, i10800, i10600, i7800, i7600, i5800, and i5600 are compatible with F5 SFP modules.

*Maximum throughput.

**Please refer to the Platform Guide: i5000/i7000/i10000/i11000 Series for the latest power ratings for your specific configurations (number of PS, highline input voltage, DC, etc.).

***This is number of physical CPU cores, vCPU cores may vary depending on the type of licenses. Please upgrade using PAY-G licenses to increase the number of vCPU cores.

†ECDHE-ECDSA-AES128-SHA256 cipher string tested.

Specifications	i11400-DS	i7820-DF
Intelligent Traffic Processing:	L7 requests per second: 1.8M L4 connections per second: .75M L4 HTTP requests per second: 12.5M Maximum L4 concurrent connections: 140M Throughput: 80 Gbps/70 Gbps L4/L7	L7 requests per second: 3M L4 connections per second: 1.2M L4 HTTP requests per second: 14M Maximum L4 concurrent connections: 80M Throughput: 80 Gbps/40 Gbps
Hardware Offload SSL/TLS:	ECC†: 55K TPS (ECDSA P-256) RSA: 63K TPS (2K keys) 25 Gbps bulk encryption*	ECC†: 25K TPS (ECDSA P-256) RSA: 40K TPS (2K keys) 20 Gbps bulk encryption*
FIPS SSL:	N/A	13k TPS
Hardware Compression:	70 Gbps	20 Gbps
Hardware DDoS Protection:	130M SYN cookies per second	70M SYN cookies per second
TurboFlex Performance Profiles	Tier 3	Tier 3
Software Compression:	N/A	N/A
Software Architecture:	64-bit TMOS	64-bit TMOS
On-Demand Upgradable:	N/A	N/A
Virtualization (Maximum Number of vCMP Guests)	8	12
Processor:	One 18-Core Intel Xeon processor**** (total 36 hyperthreaded logical processor cores)	One 6-Core Intel Xeon processor**** (total 12 hyperthreaded logical processor cores)
vCPU Numbers:	16 vCPUs	N/A
Memory:	256 GB DDR4	96 GB DDR4
Hard Drive:	Dual SSD 2x 960GB Enterprise Class SSD	Dual SSD 2x 480GB Enterprise Class SSD
Gigabit Ethernet CU Ports:	Optional SFP	Optional SFP
Gigabit Fiber Ports (SFP):	Optional SFP+ (SX or LX)	Optional SFP+ (SX or LX)
10 Gigabit Fiber Ports (SFP+):	8 SR/LR (sold separately); optional 10G copper direct attach	8 SR/LR (sold separately); optional 10G copper direct attach
40 Gigabit Fiber Ports (QSFP+):	6 SR4/LR4 (sold separately); QSFP + optical breakout cable assemblies available to convert to 10 gigabit ports	4 SR4/LR4 (sold separately) (QSFP+ optical breakout cable assemblies available to convert to 10G ports)
Power Supply:	2x 650W Platinum AC PSU (2x 650W DC PSU Optional)	2x 650W Platinum AC PSU (2x 650W DC PSU Option)
Typical Consumption:	455W (dual power supply, 110V input)**	310W (dual power supply, 110V input)**
Input Voltage:	100–240 VAC +/- 10% auto switching, 50/60hz	100-240 VAC +/- 10% auto switching, 50/60hz
Typical Heat Output:	1485 BTU/hour (dual power supply, 110V input)**	1165 BTU/hour (dual power supply, 110V input)**
Dimensions:	1.72" (4.37 cm) H x 17.4" (44.2 cm) W x 30.6" (77.72 cm) D 1U industrial standard rack-mount chassis	1.72" (4.37 cm) H x 17.4" (44.2 cm) W x 30.6" (77.72 cm) D 1U industry standard rack-mount chassis
Weight:	36 lbs. (16.3 kg) (dual power supply)	30 lbs. (13.6 kg) (dual power supply)
Operating Temperature:	32° to 104° F (0° to 40° C)	32° to 104° F (0° to 40° C)
Operational Relative Humidity:	5% to 85% at 40° C	5% to 85% at 40° C
Safety Agency Approval:	ANSI/UL 60950-1-2014 CSA 60950-1-07, including A1:2011+A2:2014 IEC 60950-1:2005, A1:2009+A2:2013 EN 60950-1:2006+A11:2009+A1:2010+A12:2011+A2:2013	ANSI/UL 60950-1-2014 CSA 60950-1-07, including A1:2011+A2:2014 IEC 60950-1:2005, A1:2009+A2:2013 EN 60950-1:2006+A11:2009+A1:2010+A12:2011+A2:2013
Certifications/ Susceptibility Standards:	ETSI EN 300 386 V1.6.1 (2012); EN 55032:2012/AC:2013 EN 55032:2012 Class A; EN 61000-3-2:2014 EN 61000-3-3:2013; EN 55024:2010 FCC Class A (Part 15), IC Class A, VCCI Class A	ETSI EN 300 386 V1.6.1 (2012); EN 55032:2012/AC:2013 EN 55032:2012 Class A; EN 61000-3-2:2014 EN 61000-3-3:2013; EN 55024:2010 FCC Class A (Part 15), IC Class A, VCCI Class A

Notes: Performance-related numbers are based on local traffic management services only. Only optics provided by F5 are supported.
SFP+ ports in i11800, i11600, i10800, i10600, i7800, i7600, i5800, and i5600 are compatible with F5 SFP modules.

*Maximum throughput.

**Please refer to the Platform Guide: i11000 Series or Platform Guide: i7000 Series for the latest power ratings for your specific configurations (number of PS, highline input voltage, DC, etc.).

***vCMP guest access to FIPS resources not supported.

****This is number of physical CPU cores, vCPU cores may vary depending on the type of licenses. Please upgrade using PAY-G licenses to increase the number of vCPU cores.

†ECDHE-ECDSA-AES128-SHA256 cipher string tested.

Specifications	i5820-DF	10350v-N/10350v-F
Intelligent Traffic Processing:	L7 requests per second: 2M L4 connections per second: 800K L4 HTTP requests per second: 7M Maximum L4 concurrent connections: 40M Throughput: 60 Gbps/35 Gbps L4/L7	L7 requests per second: 3M L4 connections per second: 1.2M L4 HTTP requests per second: 14M Maximum L4 concurrent connections: 80M Throughput: 84 Gbps/40 Gbps L4/L7
Hardware Offload SSL/TLS:	ECC†: 20K TPS (ECDSA P-256) RSA: 35K TPS (2K keys) 20 Gbps bulk encryption*	Included: 42K TPS (2K keys) Maximum: 42K TPS (2K keys) 24 Gbps bulk encryption*
FIPS SSL:	8k TPS	35,000 TPS (2K keys) (10350v-F only) 24 Gbps bulk encryption (10350v-F only)
Hardware Compression:	20 Gbps	Included: 24 Gbps; Maximum: 24 Gbps
Hardware DDoS Protection:	50M SYN cookies per second	80M SYN cookies per second
TurboFlex Performance Profiles:	Tier 3	N/A
Software Compression:	N/A	N/A
Software Architecture:	64-bit TMOS	64-bit TMOS
On-Demand Upgradable:	N/A	N/A
Virtualization (Maximum Number of vCMP Guests):	8	20
Processor:	One 4-Core Intel Xeon processor (total 8 hyperthreaded logical processing cores)	One 10-Core Intel Xeon processor (total 20 hyperthreaded logical processor cores)
Memory:	48 GB DDR4	128 GB
Hard Drive:	Dual SSD 2x 480GB Enterprise Class SSD	800 GB SSD
Gigabit Ethernet CU Ports:	Optional SFP	Optional SFP
Gigabit Fiber Ports (SFP):	Optional SFP+ (SX or LX)	Optional SFP (SX or LX)
10 Gigabit Fiber Ports (SFP+):	8 SR or LR (sold separately); Optional 10G copper direct attach	16 SR or LR (sold separately, 2 SR included); Optional 10G copper direct attach
40 Gigabit Fiber Ports (QSFP+):	4 SR4/LR4 (sold separately) (QSFP+ optical breakout cable assemblies available to convert to 10G ports)	2 SR4 (sold separately) (QSFP+ optical breakout cable assemblies available to convert to 10 gigabit ports)
Power Supply:	1x 650W Platinum AC PSU (Additional PSU optional, 2x 650W DC PSU Option)	Dual 850W included (80+Platinum efficiency), DC (10350v-N)
Typical Consumption:	265W (single power supply, 110V input)**	320W (dual supply, 48V DC**
Input Voltage:	100-240 VAC +/- 10% auto switching, 50/60hz	Operating range: 44 to 72 VDC Minimum start up voltage: 44 VDC
Typical Heat Output:	1215 BTU/hour (single power supply, 110V input)**	1095 BTU/hour (dual supply, 48V DC**
Dimensions:	1.72" (4.37 cm) H x 17.4" (44.2 cm) W x 30.6" (77.72 cm) D 1U industry standard rack-mount chassis	3.45" (8.76 cm) H x 17.3" (43.94 cm) W x 21.4" (54.36 cm) D 2U industry standard rack-mount chassis
Weight:	26 lbs. (11.8 kg) (dual power supply)	43 lbs. (19.5 kg) (dual power supply)
Operating Temperature:	32° to 104° F (0° to 40° C)	32° to 104° F (0° to 40° C)
Operational Relative Humidity:	5% to 85% at 40° C	10% to 90% at 40° C
Safety Agency Approval:	ANSI/UL 60950-1-2014 CSA 60950-1-07, including A1:2011+A2:2014 IEC 60950-1:2005, A1:2009+A2:2013 EN 60950-1:2006+A11:2009+A1:2010+A12:2011+A2:2013	UL 60950-1 2nd Edition; CAN/CSA C22.2 No. 60950-1-07 EN 60950-1:2006, 2nd Edition; IEC 60950-1:2006, 2nd Edition Evaluated to all CB Countries
Certifications/ Susceptibility Standards:	ETSI EN 300 386 V1.6.1 (2012); EN 55032:2012/AC:2013 EN 61000-3-2:2014; EN 61000-3-3:2013; EN 55024:2010; FCC Class A (Part 15), IC Class A; VCCI Class A	EEN 300 386 V1.5.1 (2010-10); EN 55022:2006+A1:2007 EN 61000-3-2:2006; EN 61000-3-3:1995+A1:2000+A2:2005 EN 55024: 2010; USA FCC Class A; NEBS compliant; VCCI Class A

Notes: Performance-related numbers are based on local traffic management services only. Only optics provided by F5 are supported.
SFP+ ports in i10800, i10600, i7800, i7600, i5800, and i5600 are compatible with F5 SFP modules.

*Maximum throughput.

**Please refer to the Platform Guide: i5000 Series or Platform Guide: 10000 Series for the latest power ratings for your specific configurations (SSL, SSD, highline input voltage, DC, etc.).

***vCMP guest access to FIPS resources not supported.

†ECDHE-ECDSA-AES128-SHA256 cipher string tested.

Specifications	10150v-N
Intelligent Traffic Processing:	L7 requests per second: 1.5M L4 connections per second: 609K L4 HTTP requests per second: N/A Maximum L4 concurrent connections: 80M Throughput: 84 Gbps/40 Gbps L4/L7
Hardware Offload SSL/TLS:	Included: 34K TPS (2K keys) Maximum: 34K TPS (2K keys) 24 Gbps bulk encryption*
FIPS SSL:	N/A
Hardware Compression:	N/A
Hardware DDoS Protection:	N/A SYN cookies per second
TurboFlex Performance Profiles:	N/A
Software Compression:	N/A
Software Architecture:	64-bit TMOS
On-Demand Upgradable:	N/A
Virtualization (Maximum Number of vCMP Guests):	12
Processor:	One 10-Core Intel Xeon processor (total 12 hyperthreaded logical processor cores)
Memory:	128 GB
Hard Drive:	800 GB SSD
Gigabit Ethernet CU Ports:	Optional SFP
Gigabit Fiber Ports (SFP):	Optional SFP (SX or LX)
10 Gigabit Fiber Ports (SFP+):	16 SR or LR (sold separately, 2 SR included); Optional 10G copper direct attach
40 Gigabit Fiber Ports (QSFP+):	2 SR4 (sold separately) (QSFP+ optical breakout cable assemblies available to convert to 10 gigabit ports)
Power Supply:	Dual 850W included (80+Platinum efficiency), or DC (10150v-N)
Typical Consumption:	320W (dual supply, 48V DC**
Input Voltage:	Operating range: 44 to 72 VDC Minimum start up voltage: 44 VDC
Typical Heat Output:	1095 BTU/hour (dual supply, 48V DC**
Dimensions:	3.45“ (8.76 cm) H x 17.3” (43.94 cm) W x 21.4” (54.36 cm) D 2U industry standard rack-mount chassis
Weight:	43 lbs. (19.5 kg) (dual power supply)
Operating Temperature:	32° to 104° F (0° to 40° C)
Operational Relative Humidity:	10% to 90% at 40° C
Safety Agency Approval:	UL 60950-1 2nd Edition; CAN/CSA C22.2 No. 60950-1-07 EN 60950-1:2006, 2nd Edition; IEC 60950-1:2006, 2nd Edition Evaluated to all CB Countries
Certifications/ Susceptibility Standards:	EEN 300 386 V1.5.1 (2010-10); EN 55022:2006+A1:2007 EN 61000-3-2:2006; EN 61000-3-3:1995+A1:2000+A2:2005 EN 55024: 2010; USA FCC Class A; NEBS compliant; VCCI Class A

Notes: Performance-related numbers are based on local traffic management services only. Only optics provided by F5 are supported.

*Maximum throughput.

**Please refer to the Platform Guide: 10000 Series or Platform Guide: i15000 Series for the latest power ratings for your specific configurations (number of PS, highline input voltage, DC, etc.).

†ECDHE-ECDSA-AES128-SHA256 cipher string tested.

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Virtual Clustered Multiprocessing (vCMP)

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