BIG-IP System



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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 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 DDoS mitigation, contextual access management, and more.

Ensure the easiest deployment for cloud or container environments

Save time with the only simple, out-of-the-box native integration with leading private cloud, cloud interconnect colocation, 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.

Standardize Your App Delivery Services

BIG-IP ADC appliances can simplify your network and reduce total cost of ownership (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 performance but 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 Blue Medora 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.

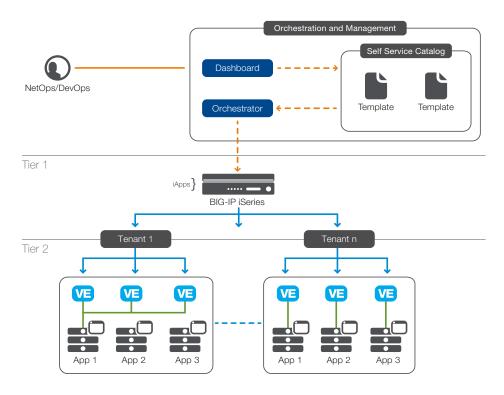


Figure 1: Orchestrated and automated deployment of app services in a two-tier private cloud architecture.

Consistent App Delivery and Security for Public Cloud

As more enterprise applications migrate to public cloud, it's becoming more difficult to maintain network requirements and consistent application policies. In addition, many IT architects are unaware of the amount of public cloud apps deployed, the current configurations and services for those apps, and how to discover apps in flight. Organizations are turning to interconnection services at colocation providers for direct public cloud access; however, application delivery and security services across public cloud providers is disparate and varied, compared to on-premises and private cloud solutions.

F5® Application Connector is an add-on to the F5 BIG-IP® platform, allowing services insertion for public cloud applications. It also acts as a cloud proxy instance for securely connecting public clouds to an organization's application service infrastructure within cloud interconnects (colocations) or data centers. This enables the use of public cloud resources as part of an organization's compute infrastructure. Application Connector also performs workload discovery within the Amazon Web Services (AWS) and Azure public cloud, and provides a secure connection back to interconnect services or data centers, allowing application services insertion on the BIG-IP platform.

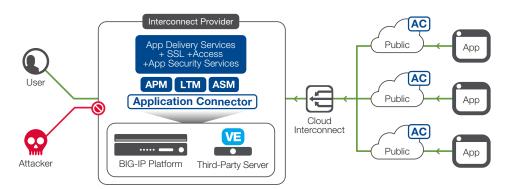


Figure 2: Application Connector helps you easily search and find public cloud-hosted workloads in AWS and Azure. Securely connect all public cloud apps, and insert app delivery and additional security services such as SSL. Provide consistency across app deployments, and securely maintain sensitive SSL keys from a central location.

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 offers many ways to program the application services fabric and network, enabling organizations to automate deployment, react in real time to events, 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-certified hardware appliances that support a FIPS 140-2 Level 2 implementation for RSA cryptographic key generation, use, and protection. Keys generated on or imported into a BIG-IP system hardware security module (HSM) are not extractable in plain-text format. BIG-IP hardware appliances with integrated HSMs also have tamper-evident seals with a hardened-epoxy cover that, if removed, will render the card useless. For additional protection, the BIG-IP 10350v-F supports a FIPS 140-2 Level 3 implementation of the Internal HSM (PCI card). This security rating means the 10350v-F HSM card adds tamper-resistance, which is an additional means of detection to the tamper-evident methods of Level 2, as well as a response to physical access attempts, or to cryptographic module use or tampering.

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	12250v	i11800

Specifications	122307	111000
Intelligent Traffic Processing:	L7 requests per second: 4M L4 connections per second: 1.5M L4 HTTP requests per second: 14M Maximum L4 concurrent connections: 80M Throughput: 84 Gbps/40 Gbps L4/L7	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
Hardware Offload SSL/TLS:	Included: 240K TPS (2K keys) Maximum: 240K TPS (2K keys) 40 Gbps bulk encryption*	ECC ¹ : 48K TPS (ECDSA P-256) RSA: 80K TPS (2K Keys) 40 Gbps bulk encryption*
FIPS SSL:	N/A	N/A
Hardware Compression:	Included: 40 Gbps, Maximum: 40 Gbps	40 Gbps
Hardware DDoS Protection:	80M SYN cookies per second	130M SYN cookies per second
TurboFlex Performance Profiles:	N/A	Tier 3 (2x bandwidth)
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):	24	32
Processor:	One 12-Core Intel Xeon processor (total 24 hyperthreaded logical processor cores)	One 18-Core Intel Xeon processor (total 36 hyperthreaded logical processor cores)
Memory:	128 GB	256 GB DDR4
Hard Drive:	800 GB 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+):	16 SR or LR (sold separately, 2 SR included); Optional 10G copper direct attach	8 SR/LR (sold separately); 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)	6 SR4/LR4 (sold separately); QSFP + optical breakout cable assemblies available to convert to 10 gigabit ports
Power Supply:	Dual 850W included (80+ Platinum efficiency), DC optional	2x 650W Platinum AC PSU (2x 650W DC PSU Optional)
Typical Consumption:	330W (dual supply, 110V input)**	455W (dual power supply, 110V input)**
Input Voltage:	90-240 VAC +/- 10% auto switching, 50/60hz	100-240 VAC +/- 10% auto switching, 50/60hz
Typical Heat Output:	1125 BTU/hour (dual supply, 110V input)**	1555 BTU/hour (dual power supply, 110V input)**
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	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:	43 lbs. (19.5 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:	10% to 90% at 40° C	5% to 85% 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	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:	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 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: 12000 series or Platform Guide: 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	i11600	i10800

Opodificationic	111000	110000
Intelligent Traffic Processing:	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	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
Hardware Offload SSL/TLS:	ECC ¹ : 30K TPS (ECDSA P-256) RSA: 37K TPS (2K keys) 40 Gbps bulk encryption*	ECC [†] : 48K TPS (ECDSA P-256) RSA: 80K TPS (2K Keys) 40 Gbps bulk encryption*
FIPS SSL:	N/A	N/A
Hardware Compression:	N/A	40 Gbps
Hardware DDoS Protection:	70M SYN cookies per second	130M SYN cookies per second
TurboFlex Performance Profiles:	N/A	Tier 3 (2x bandwidth)
Software Compression:	25 Gbps	N/A
Software Architecture:	64-bit TMOS	64-bit TMOS
On-Demand Upgradable:	Yes	N/A
Virtualization (Maximum Number of vCMP Guests):	N/A	16
Processor:	One 18-Core Intel Xeon processor (total 36 hyperthreaded logical processor cores)	One 8-Core Intel Xeon processor (total 16 hyperthreaded logical processor cores)
Memory:	256 GB DDR4	128 GB DDR4
Hard Drive:	1x 960 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/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 10G 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 Option)
Typical Consumption:	455W (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:	1555 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 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 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 <u>Platform Guide: i10000/i11000 Series</u> for the latest power ratings for your specific configurations (number of PS, highline input voltage, DC, etc.).

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





Opcomoations	110000	10000 1/ 10000 1 11/ 10000 1
Intelligent Traffic Processing:	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	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 ¹ : 30K TPS (ECDSA P-256) RSA: 37K TPS (2K Keys) 40 Gbps bulk encryption*	Included: 42K TPS (2K keys) Maximum: 42K TPS (2K keys) 24 Gbps bulk encryption
FIPS SSL:	N/A	FIPS 140-2 Level 3 (10350v-F only)*** 35,000 TPS (2K keys) (10350v-F only) 24 Gbps bulk encryption (10350v-F only)
Hardware Compression:	N/A	Included: 24 Gbps; Maximum: 24 Gbps
Hardware DDoS Protection:	70M SYN cookies per second	80M SYN cookies per second
TurboFlex Performance Profiles:	N/A	N/A
Software Compression:	25 Gbps	N/A
Software Architecture:	64-bit TMOS	64-bit TMOS
On-Demand Upgradable:	Yes	N/A
Virtualization (Maximum Number of vCMP Guests):	N/A	20
Processor:	One 8-Core Intel Xeon processor (total 16 hyperthreaded logical processor cores)	One 10-Core Intel Xeon processor (total 20 hyperthreaded logical processor cores)
Memory:	128 GB DDR4	128 GB
Hard Drive:	1x 480 GB 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/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+):	6 SR4/LR4 (sold separately) (QSFP+ optical breakout cable assemblies available to convert to 10 gigabit ports)	2 SR4 (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)	Dual 850W included (80+Platinum efficiency), AC (10350v) or DC (10350v-N)
Typical Consumption:	415W (dual power supply, 110V input)**	320W (dual supply, 48V DC or 110V AC input)
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:	1420 BTU/hour (dual power supply, 110V input)**	1095 BTU/hour (dual supply, 48V DC or 110V AC 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	$3.45^{\rm o}$ (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:	36 lbs. (16.3 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 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	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: i10000 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.





10055s/10050s/10000s

Specifications 10255v/10250v/10200v-SSL

Specifications	10233V/10230V/10200V-33L	100338/100308/100008
Intelligent Traffic Processing:	L7 requests per second: 2M L4 connections per second: 1M L4 HTTP requests per second: 14M Maximum L4 concurrent connections: 36M Throughput: 80 Gbps/40 Gbps L4/L7	L7 requests per second: 1M L4 connections per second: 500K L4 HTTP requests per second: 7M Maximum L4 concurrent connections: 36M Throughput: 80 Gbps/40 Gbps L4/L7
Hardware Offload SSL/TLS:	Included: 42,000 TPS (2K keys) Max for 10200v: 42,000 TPS (2K keys) Max for 10200v-SSL: 75,000 TPS (2K keys) 22 Gbps bulk encryption* for 10200v 33 Gbps bulk encryption* for 10200v-SSL	Included: 21,000 TPS (2K keys) Maximum: 21,000 TPS (2K keys) 22 Gbps bulk encryption*
FIPS SSL:	FIPS 140-2 Level 2 (10200v option)*** 9,000 TPS (2K keys), 22 Gbps bulk encryption*	N/A
Hardware Compression:	Included: 24 Gbps; Maximum: 24 Gbps	N/A
Hardware DDoS Protection:	80M SYN cookies per second	40M SYN cookies per second
TurboFlex Performance Profiles:	N/A	N/A
Software Compression:	N/A	Included: 12 Gbps Maximum: 12 Gbps
Software Architecture:	64-bit TMOS	64-bit TMOS
On-Demand Upgradable:	N/A	Yes
Virtualization (Maximum Number of vCMP Guests):	12 (10250v); 6 (10200v)	N/A
Processor:	Intel hex core (total 12 hyperthreaded logical processor cores)	Intel hex core (total 12 hyperthreaded logical processor cores)
Memory:	48 GB	48 GB
Hard Drive:	Two 1 TB drives (RAID 1) (10200v) 400 GB solid state drive (10250v) Two 400 GB solid state drive (RAID1) (10255v)	Two 1 TB drives (RAID 1) (10000s) 400 GB solid state drive (10050s) Two 400 GB solid state drive (RAID1) (10055s)
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+):	16 SR or LR (sold separately, 2 SR included); Optional 10G copper direct attach	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)	2 SR4 (sold separately) (QSFP+ optical breakout cable assemblies available to convert to 10 gigabit ports)
Power Supply:	Dual 850W included (80+ Platinum efficiency), DC optional	Dual 850W included (80 Plus Platinum efficiency), DC optional
Typical Consumption:	320W (dual supply, 110V input)**	320W (dual supply, 110V input)**
Input Voltage:	90-240 VAC +/- 10% auto switching, 50/60hz	90-240 VAC +/- 10% auto switching, 50/60hz
Typical Heat Output:	1090 BTU/hour (dual supply, 110V input)**	1090 BTU/hour (dual supply, 110V input)**
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	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)	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	5% to 85% 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	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 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 VCCI Class A

^{*} Maximum throughput.

^{**} Please refer to the 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.





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_	pecifications	i7800	i7600
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Specifications	17000	17000
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 ¹ : 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	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/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, i7800, i7800, i7800, and i5600 are compatible with F5 SFP modules.

^{*} Maximum throughput.

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

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





7055s/7050s/7000s

Specifications 7255v/7250v/7200v-SSL

Intelligent Traffic Processing:	L7 requests per second: 1.6M L4 connections per second: 775K L4 HTTP requests per second: 7M Maximum L4 concurrent connections: 24M Throughput: 40 Gbps/20 Gbps L4/L7	L7 requests per second: 800K L4 connections per second: 390K L4 HTTP requests per second: 3.5M Maximum L4 concurrent connections: 24M Throughput: 40 Gbps/20 Gbps L4/L7
Hardware Offload: SSL/TLS:	Included: 25,000 TPS (2K keys) Maximum for 7200v: 25,000 TPS (2K keys) Maximum for 7200v-SSL: 60,000 TPS (2K keys) 18 Gbps bulk encryption for 7200v 19 Gbps bulk encryption* for 7200v-SSL	Included: 15,000 TPS (2K keys) Maximum: 15,000 TPS (2K keys) 18 Gbps bulk encryption*
FIPS SSL:	FIPS 140-2 Level 2 (7200v option)*** 9,000 TPS (2K keys); 18 Gbps bulk encryption*	N/A
Hardware Compression:	Included: 18 Gbps, Maximum: 18 Gbps	N/A
Hardware DDoS Protection:	40M SYN cookies per second	20M SYN cookies per second
TurboFlex Performance Profiles	N/A	N/A
Software Compression:	N/A	Included: 9 Gbps, Maximum: 9 Gbps
Software Architecture:	64-bit TMOS	64-bit TMOS
On-Demand Upgradable:	N/A	Yes
Virtualization (Maximum Number of vCMP Guests):	8 (7250v), 4 (7200v)	N/A
Processor:	1 quad core Intel Xeon processor (total 8 hyperthreaded logical processing cores)	1 quad core Intel Xeon processor (total 8 hyperthreaded logical processing cores)
Memory:	32 GB	32 GB
Hard Drive:	Two 1 TB (RAID 1) (7200v) 400 GB solid state drive (7250v) Two 400 GB solid state drive (RAID1) (7255v)	Two 1 TB (RAID 1) (7000s) 400 GB solid state drive (7050s) Two 400 GB solid state drive (RAID1) (7055s)
Gigabit Ethernet CU Ports:	4	4
Gigabit Fiber Ports (SFP):	Optional SFP (SX, LX, or copper)	Optional SFP (SX, LX, or copper)
10 Gigabit Fiber Ports (SFP+):	8 SR or LR (sold separately, 2 SR included); Optional 10G copper direct attach	8 SR or LR (sold separately, 2 SR included); Optional 10G copper direct attach
40 Gigabit Fiber Ports (QSFP+):	N/A	N/A
Power Supply:	Two 400W included (80 Plus Gold Efficiency), DC optional	Two 400W included (80 Plus Gold Efficiency), DC optional
Typical Consumption:	205W (dual supply, 110V input)**	205W (dual supply, 110V input)**
Input Voltage:	90-240 VAC +/- 10% auto switching, 50/60hz	90-240 VAC +/- 10% auto switching, 50/60hz
Typical Heat Output:	700 BTU/hour (dual supply, 110V input)**	700 BTU/hour (dual supply, 110V input)**
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	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:	40 11 (40 51) (1 1 1)	
. 3	43 lbs. (19.5 kg) (dual power supply)	43 lbs. (19.5 kg) (dual power supply)
Operating Temperature:	32° to 104° F (0° to 40° C)	43 lbs. (19.5 kg) (dual power supply) 32° to 104° F (0° to 40° C)
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Operating Temperature:	32° to 104° F (0° to 40° C)	32° to 104° F (0° to 40° C)
Operating Temperature: Operational Relative Humidity:	32° to 104° F (0° to 40° C) 5% to 85% at 40° C ANSI/UL 60950-1-2011 CSA 60950-1-07, including Amendment 1:2011 Low Voltage Directive 2006/95/EC CB Scheme; EN 60950-1:2006+A11:2009+A1:2010+A12:2011	32° to 104° F (0° to 40° C) 5% to 85% at 40° C ANSI/UL 60950-1-2011 CSA 60950-1-07, including Amendment 1:2011 Low Voltage Directive 2006/95/EC; CB Scheme EN 60950-1:2006+A11:2009+A1:2010+A12:2011

^{*} Maximum throughput.

^{**} Please refer to the Platform Guide: 7000 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.





i5600

Specifications	i5800	
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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 Series for the latest power ratings for your specific configurations (SSL, SSD, highline input voltage, DC, etc.).

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





5050s/5000s

Specifications	5250v/5200v

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Intelligent Traffic Processing:	L7 requests per second: 1.5M L4 connections per second: 700K L4 HTTP requests per second: 7M Maximum L4 concurrent connections: 24M Throughput: 30 Gbps/15 Gbps L4/L7	L7 requests per second: 750K L4 connections per second: 350K L4 HTTP requests per second: 3.5M Maximum L4 concurrent connections: 24M Throughput: 30 Gbps/15 Gbps L4/L7
Hardware Offload: SSL/TLS:	Included: 21,000 TPS (2K keys) Maximum: 21,000 TPS (2K keys) 12 Gbps bulk encryption*	Included: 10,000 TPS (2K keys) Maximum: 10,000 TPS (2K keys) 12 Gbps bulk encryption*
FIPS SSL:	FIPS 140-2 Level 2 (5250v option)*** 5,000 TPS (2K keys); 12 Gbps bulk encryption*	N/A
Hardware Compression:	Included: 12 Gbps, Maximum: 12 Gbps	N/A
Hardware DDoS Protection:	40M SYN cookies per second	20M SYN cookies per second
TurboFlex Performance Profiles	N/A	N/A
Software Compression:	N/A	Included: 6 Gbps Maximum: 6 Gbps
Software Architecture:	64-bit TMOS	64-bit TMOS
On-Demand Upgradable:	N/A	Yes
Virtualization (Maximum Number of vCMP Guests)	8 (5250v), 4 (5200v)	N/A
Processor:	1 quad core Intel Xeon processor (total 8 hyperthreaded logical processing cores)	1 quad core Intel Xeon processor (total 8 hyperthreaded logical processing cores)
Memory:	32 GB	32 GB
Hard Drive:	1 TB (5200v); 400 GB solid state drive (5250v)	1 TB (5000s) 400 GB solid state drive (5050s)
Gigabit Ethernet CU Ports:	4	4
Gigabit Fiber Ports (SFP):	Optional SFP (SX, LX, or copper)	Optional SFP (SX, LX, or copper)
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+):	N/A	N/A
Power Supply:	One 400W included (80 Plus Gold Efficiency), dual power and DC optional	One 400W included (80 Plus Gold Efficiency), dual power and DC optional
Typical Consumption:	165W (single supply, 110V input)**	165W (single supply, 110V input)**
Input Voltage:	90-240 VAC +/- 10% auto switching, 50/60hz	90-240 VAC +/- 10% auto switching, 50/60hz
Typical Heat Output:	564 BTU/hour (single supply, 110V input)**	564 BTU/hour (single supply, 110V input)**
Dimensions:	1.75" (4.45 cm) H x 17" (43.18 cm) W x 21" (53.34 cm) D 1U industry standard rack-mount chassis	1.75" (4.45 cm) H x 17" (43.18 cm) W x 21" (53.34 cm) D 1U industry standard rack-mount chassis
Weight:	21 lbs. (9.53 kg) (single power supply)	21 lbs. (9.53 kg) (one 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 60950-1-2011 CSA 60950-1-07, including Amendment 1:2011 Low Voltage Directive 2006/95/EC; CB Scheme EN 60950-1:2006+A11:2009+A1:2010+A12:2011 IEC 60950-1:2005, A1:2009	ANSI/UL 60950-1-2011 CSA 60950-1-07, including Amendment 1:2011 Low Voltage Directive 2006/95/EC; CB Scheme EN 60950-1:2006+A11:2009+A1:2010+A12:2011 IEC 60950-1:2005, A1:200
Certifications/ Susceptibility Standards:	EN 300 386 V1.5.1 (2010-10); EN 55022:2010 EN 61000-3-2:2006+A1:2009+A2:2009; EN 61000-3-3:2008 EN 55024:2010; EN 55022:2010; EN 61000-3-3:2008 EN 55024:2010; USA FCC Class A; VCCI Class A	EN 300 386 V1.5.1 (2010-10); EN 55022:2010 EN 61000-3-2:2006+A1:2009+A2:2009; EN 61000-3-3:2008 EN 55024:2010; EN 55022:2010; EN 61000-3-3:2008 EN 55024:2010; USA FCC Class A; VCCI Class A

^{*} Maximum throughput.

** Please refer to the Platform Guide: 5000 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.





S	oecifications	i4800	i4600

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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:	1x 500 GB Enterprise Class HDD	1x 500 GB 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

^{*} Maximum throughput.

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

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





Specifications 4200v 4000s

Intelligent Traffic Processing:	L7 requests per second: 850K L4 connections per second: 300K L4 HTTP requests per second: 2.5M Maximum L4 concurrent connections: 10M Throughput: 10 Gbps L4/L7	L7 requests per second: 425K L4 connections per second: 150K L4 HTTP requests per second: 1.25M Maximum L4 concurrent connections: 10M Throughput: 10 Gbps L4/L7
Hardware Offload: SSL/TLS:	Included: 9,000 TPS (2K keys) Maximum: 9,000 TPS (2K keys) 8 Gbps bulk encryption*	Included: 4,500 TPS (2K keys) Maximum: 4,500 TPS (2K keys) 8 Gbps bulk encryption*
FIPS SSL:	N/A	N/A
Hardware Compression:	Included: 8 Gbps Maximum: 8 Gbps	N/A
Hardware DDoS Protection:	N/A	N/A
TurboFlex Performance Profiles:	N/A	N/A
Software Compression:	N/A	Included: 4 Gbps Maximum: 4 Gbps
Software Architecture:	64-bit TMOS	64-bit TMOS
On-Demand Upgradable:	Yes	Yes
Virtualization (Maximum Number of vCMP Guests):	N/A	N/A
Processor:	1 quad core Intel Xeon processor (total 8 hyperthreaded logical processing cores)	1 quad core Intel Xeon processor (total 8 hyperthreaded logical processing cores)
Memory:	16 GB	16 GB
Hard Drive:	500 GB	500 GB
Gigabit Ethernet CU Ports:	8	8
Gigabit Fiber Ports (SFP):	Optional SFP (SX, LX, or copper)	Optional SFP (SX, LX, or copper)
10 Gigabit Fiber Ports (SFP+):	2 SR or LR (sold separately); Optional 10G copper direct attach	2 SR or LR (sold separately); Optional 10G copper direct attach
40 Gigabit Fiber Ports (QSFP+):	N/A	N/A
Power Supply:	One 400W included (80 Plus Platinum efficiency), dual power and DC optional	One 400W included (80 Plus Platinum efficiency), dual power and DC optional
Typical Consumption:	95W (single supply, 110V input)**	95W (single supply, 110V input)**
Input Voltage:	90-240 VAC +/- 10% auto switching, 50/60hz	90-240 VAC +/- 10% auto switching, 50/60hz
Typical Heat Output:	324 BTU/hour (single supply, 110V input)**	324 BTU/hour (single supply, 110V input)**
Dimensions:	1.75" (4.45 cm) H x 17" (43.18 cm) W x 21" (53.34 cm) D 1U industry standard rack-mount chassis	1.75" (4.45 cm) H x 17" (43.18 cm) W x 21" (53.34 cm) D 1U industry standard rack-mount chassis
Weight:	20 lbs. (9.1 kg) (one power supply)	20 lbs. (9.1 kg) (one 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:	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	EN 60950-1:2006, 2nd Edition IEC 60950-1:2006, 2nd Edition Evaluated to all CB Countries UL 60950-1 2nd Edition CAN/CSA C22.2 No. 60950-1-07
Certifications/ Susceptibility Standards:	EN 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; VCCI Class A	EN 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; 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: 4000 Series for the latest power ratings for your specific configurations (SSL, SSD, highline input voltage, DC, etc.).





Specifications i2800 i26	i2600
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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 ¹ : 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:	1x 500 GB Enterprise Class HDD	1x 500 GB 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

^{*} Maximum throughput.

** Please refer to the Platform Guide: i2000 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 2200s 2000s

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Intelligent Traffic Processing:	L7 requests per second: 425K L4 connections per second: 150K L4 HTTP requests per second: 1.1M Maximum L4 concurrent connections: 5M Throughput: 5 Gbps L4/L7	L7 requests per second: 212K L4 connections per second: 75K L4 HTTP requests per second: 550K Maximum L4 concurrent connections: 5M Throughput: 5 Gbps L4/L7
Hardware Offload: SSL/TLS:	Included: 4,000 TPS (2K keys) Maximum: 4,000 TPS (2K keys) 4 Gbps bulk encryption*	Included: 2,000 TPS (2K keys) Maximum: 2,000 TPS (2K keys) 4 Gbps bulk encryption*
FIPS SSL:	N/A	N/A
Hardware DDoS Protection:	N/A	N/A
Hardware Compression:	Included: 4 Gbps Maximum: 4 Gbps	N/A
TurboFlex Performance Profiles:	N/A	N/A
Software Compression:	N/A	Included: 2.5 Gbps Maximum: 2.5 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:	Intel dual core (total 4 hyperthreaded logical processing cores)	Intel dual core (total 4 hyperthreaded logical processing cores)
Memory:	8 GB	8 GB
Hard Drive:	500 GB	500 GB
Gigabit Ethernet CU Ports:	8	8
Gigabit Fiber Ports (SFP):	Optional SFP (SX, LX, or copper)	Optional SFP (SX, LX, or copper)
10 Gigabit Fiber Ports (SFP+):	2 SR or LR (sold separately); Optional 10G copper direct attach	2 SR or LR (sold separately); Optional 10G copper direct attach
40 Gigabit Fiber Ports (QSFP+):	N/A	N/A
Power Supply:	One 400W included (80+ Platinum efficiency), dual power and DC optional	One 400W included (80+ Platinum efficiency), dual power and DC optional
Typical Consumption:	74W (single supply, 110V input)**	74W (single supply, 110V input)**
Input Voltage:	90-240 VAC +/- 10% auto switching, 50/60hz	90-240 VAC +/- 10% auto switching, 50/60hz
Typical Heat Output:	252 BTU/hour (single supply, 110V input)**	252 BTU/hour (single supply, 110V input)**
Dimensions:	1.75" (4.45 cm) H x 17" (43.18 cm) W x 21" (53.34 cm) D 1U industry standard rack-mount chassis	1.75" (4.45 cm) H x 17" (43.18 cm) W x 21" (53.34 cm) D 1U industry standard rack-mount chassis
Weight:	20 lbs. (9.1 kg) (one power supply)	20 lbs. (9.1 kg) (one 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:	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	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:	EN 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; VCCI Class A	EN 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; 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: 2000 Series for the latest power ratings for your specific configurations (SSL, SSD, highline input voltage, DC, etc.).

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