

# Barracuda CloudGen Firewall F-Series

Protecting cloud connected users, network workloads and devices wherever they reside



As you integrate a growing number of public-cloud platforms and environments into your network, your firewalls have to do more than just secure your perimeter. They also have to serve as the linchpin of your IT communications flow, ensuring highly reliable and cost-effective connections. Barracuda CloudGen Firewall was designed to **optimize performance, security, and availability of today's dispersed enterprise SD-WANs.**

- Security
  - Data Protection
  - Application Delivery



## The Barracuda Advantage

- Simple pricing with no per-application or per-user/group licensing fees.
- Unlimited site-to-site and client-to-site VPN included
- Deploy the way you want: hardware, virtual, or cloud
- Configuration and lifecycle management via one graphical user interface without the need for a command-line interface

## Product Spotlight

- Full user/group awareness
- Full application visibility and granular access control
- Advanced Threat Protection (incl. sandboxing)
- Built-in web security and IDS/IPS
- Full SD-WAN capabilities included
- Cloud-ready application-based provider selection



## Full Next-Generation Security

Barracuda CloudGen Firewall is designed and built from the ground up to provide comprehensive, next-generation firewall protection. Firewalling, IPS, URL filtering, dual antivirus and application control take place directly in the data path. More resource-intensive tasks like sandboxing — required for protecting against ransomware—are seamlessly integrated in the cloud. All CloudGen Firewall platforms and models provide the same level of security, maintaining maximum security from branch offices to headquarters.



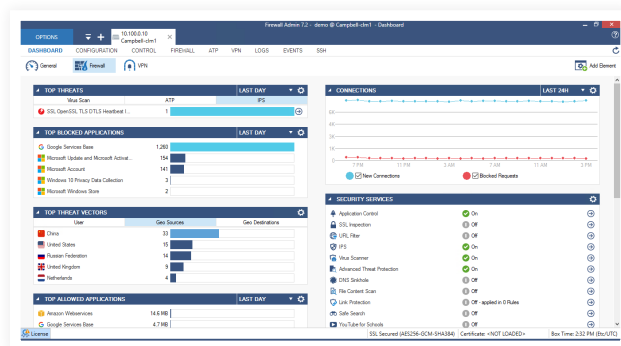
## Full SD-WAN Capability

In the cloud era, you need to connect branch offices with the cloud in a direct and secure way. Backhauling traffic to the central Internet gateway using MPLS can be very cost-intensive. Barracuda CloudGen Firewalls let you replace costly MPLS connections with cost-efficient broadband connections. You can utilize up to 24 broadband connections per VPN tunnel for increased bandwidth at lower cost.



## Connecting The Dots

Barracuda CloudGen Firewall combines next-generation security and SD-WAN capabilities in one product that that you can manage centrally using an intuitive, single-pane-of-glass solution. This lets you access the benefits of the cloud safely, and to optimize cloud access from anywhere in the network. Low line costs and efficient administration help to reduce operating costs significantly.



Barracuda CloudGen Firewall's dashboard provides real-time information and summaries of what is going on in an organization's network.

Barracuda CloudGen Firewalls are the perfect solution for central management, especially when it comes to distributed environments like ours. Performance problems? Not anymore!

Alexander Maute  
Director IT Infrastructure  
Eissmann Group Automotive



## Technical Specs

### Firewall

- Stateful packet inspection and forwarding
- Full user-identity awareness
- IDS/IPS
- Application control and granular application enforcement
- Interception and decryption of SSL/TLS encrypted applications
- Antivirus and web filtering in single pass mode
- Email security
- SafeSearch enforcement
- Google Accounts Enforcement
- Denial of Service protection (DoS/DDoS)
- Spoofing and flooding protection
- ARP spoofing and trashing protection
- DNS reputation filtering
- NAT (SNAT, DNAT), PAT
- Dynamic rules / timer triggers
- Single object-oriented rule set for routing, bridging, and routed bridging
- Virtual rule test environment

### Protocol Support

- IPv4, IPv6
- BGP/OSPF/RIP
- VoIP (H.323, SIP, SCCP [skinny])
- RPC protocols (ONC-RPC, DCE-RPC)
- 802.1q VLAN

### Intrusion Detection and Prevention

- Protection against exploits, threats and vulnerabilities
- Packet anomaly and fragmentation protection
- Advanced anti-evasion and obfuscation techniques
- Automatic signature updates

### Advanced Threat Protection

- Dynamic, on-demand analysis of malware programs (sandboxing)
- Dynamic analysis of documents with embedded exploits (PDF, Office, etc.)
- Detailed forensic analysis
- Botnet and spyware protection
- TypoSquatting and link protection for email

### Central Management Options via Barracuda Firewall Control Center

- Administration for unlimited firewalls
- Support for multi-tenancy
- Multi-administrator support & RCS
- Zero-Touch Deployment
- Enterprise/MSP licensing
- Template & repository-based management
- REST API

### High Availability

- Active-passive
- Transparent failover without session loss
- Encrypted HA communication

### Traffic Intelligence & SD-WAN

- Simultaneous use of multiple uplinks (transports) per VPN tunnel
- FIPS 140-2 certified cryptography
- Auto-VPN tunnel creation between remote spoke locations based on application type
- Dynamic bandwidth detection
- Performance-based transport selection
- Application-aware traffic routing
- Adaptive session balancing across multiple uplinks
- Traffic Replication (forward error correction)
- Application-based provider selection
- Application-aware traffic routing (VPN)
- Traffic shaping and QoS
- Built-in data deduplication

### VPN

- Drag & drop VPN tunnel configuration
- Network Access Control
- iOS and Android mobile device VPN support
- Multi-factor authentication for SSL VPN and CudaLaunch

### Infrastructure Services

- DHCP server, relay
- SIP, HTTP, SSH, FTP proxies
- SNMP and IPFIX support
- DNS Cache
- Wi-Fi (802.11n) on selected models

## Support Options

### Barracuda Energize Updates

- Standard technical support
- Firmware updates
- IPS signature updates
- Application control definition updates
- Web filter updates

### Instant Replacement Service

- Replacement unit shipped next business day
- 24/7 technical support
- Free hardware refresh every four years

## Available Bundles

- **Advanced Threat and Malware Protection** combines gateway-based protection against malware, viruses with Advanced Threat Protection's sandboxing to protect against network breaches, zero-day malware exploits and other advanced malware like ransomware.
- **Advanced Remote Access** provides a customizable and easy-to-use portal-based SSL VPN as well as sophisticated Network Access Control (NAC) functionality and CudaLaunch support.
- **Total Protect** bundles the hardware unit with Energize Updates, Application Control, IPS, Web Filter, Malware Protection, Email Security, Warranty Extension, and 8x5 basic support.
- **Total Protect PLUS** adds Advanced Threat and Malware Protection, Advanced Remote Access, and 24x7 support to Total Protect bundle.

ENTRY AND BRANCH OFFICE MODELS	F12	F18	F80	F82.DSLA	F180	F183	F183R	F280
<b>PERFORMANCE</b>								
Firewall Throughput <sup>1</sup>	1.2 Gbps	1.0 Gbps	1.5 Gbps	1.5 Gbps	1.7 Gbps	2.0 Gbps	2.1 Gbps	3.7 Gbps
VPN Throughput <sup>2</sup>	220 Mbps	190 Mbps	240 Mbps	240 Mbps	300 Mbps	300 Mbps	320 Mbps	1.1 Gbps
IPS Throughput <sup>3</sup>	400 Mbps	400 Mbps	400 Mbps	400 Mbps	500 Mbps	580 Mbps	790 Mbps	1.2 Gbps
NGFW Throughput <sup>4</sup>	250 Mbps	300 Mbps	400 Mbps	400 Mbps	550 Mbps	700 Mbps	800 Mbps	1.0 Gbps
Threat Protection Throughput <sup>5</sup>	230 Mbps	320 Mbps	380 Mbps	380 Mbps	480 Mbps	600 Mbps	700 Mbps	900 Mbps
Concurrent Sessions	80,000	80,000	80,000	80,000	100,000	100,000	100,000	250,000
New Session/s	8,000	8,000	8,000	8,000	9,000	9,000	9,000	10,000
<b>HARDWARE</b>								
Form Factor	Compact	Desktop	Desktop	Desktop	Desktop	Desktop	Compact, DIN rail	Desktop
Copper Ethernet NICs	5x1 GbE	4x1 GbE	4x1 GbE	4x1 GbE	6x1 GbE	6x1 GbE	5x1 GbE	6x1 GbE
Fiber NICs (SFP)	-	-	-	1x1 GbE	-	2x1 GbE	2x1 GbE	-
Integrated Switch	-	-	-	-	8-port	-	-	8-port
Integrated Modem	-	-	-	DSL Annex A, RJ11	-	-	-	-
Wi-Fi Access Point	-	-	•	•	•	•	-	•
Power Supply	Single, external	Single, external	Single, external	Single, external	Single, external	Single, external	Phoenix 6-pin	Single, external
<b>FEATURES</b>								
Firewall incl. IPS	•	•	•	•	•	•	•	•
Application Control	•	•	•	•	•	•	•	•
Dynamic Routing	•	•	•	•	•	•	•	•
Application-based Provider Selection	•	•	•	•	•	•	•	•
Client-to-Site and Site-to-Site VPN (unlimited)	•	•	•	•	•	•	•	•
SSL Interception	•	•	•	•	•	•	•	•
SD-WAN	•	•	•	•	•	•	•	•
Web Filter	•	•	•	•	•	•	•	•
Zero-Touch Deployment	•	•	•	•	•	•	•	•
Advanced Threat Protection	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional
Malware Protection	Optional <sup>1</sup>	Optional	Optional	Optional	Optional	Optional	Optional	Optional
Advanced Threat and Malware Protection	-	Optional	Optional	Optional	Optional	Optional	Optional	Optional
Advanced Remote Access	-	Optional	Optional	Optional	Optional	Optional	Optional	Optional
Total Protect / Total Protect PLUS	Optional <sup>2</sup>	Optional	Optional	Optional	Optional	Optional	Optional	Optional

<sup>1</sup> For model F12, malware protection utilizes cloud-based malware protection as part of an active Advanced Threat Protection subscription.

<sup>2</sup> For model F12, Total Protect PLUS bundle utilizes cloud-based malware protection; item Advanced Remote Access is not available.



MID-RANGE MODELS	F380	F400 SUBMODELS		F600 SUBMODELS				
		STD	F20	C10	C20	F10	F20	E20
<b>PERFORMANCE</b>								
Firewall Throughput <sup>1</sup>	5.2 Gbps	6.0 Gbps	6.5 Gbps	11 Gbps		11 Gbps		20 Gbps
VPN Throughput <sup>2</sup>	1.4 Gbps	1.4 Gbps	1.4 Gbps	3.1 Gbps		3.1 Gbps		5.6 Gbps
IPS Throughput <sup>3</sup>	2.0 Gbps	2.2 Gbps	2.2 Gbps	4.6 Gbps		4.6 Gbps		8.0 Gbps
NGFW Throughput <sup>4</sup>	1.4 Gbps	1.6 Gbps	1.8 Gbps	4.2 Gbps		4.2 Gbps		6.4 Gbps
Threat Protection Throughput <sup>5</sup>	1.2 Gbps	1.4 Gbps	1.7 Gbps	4.0 Gbps		4.0 Gbps		5.8 Gbps
Concurrent Sessions	400,000	500,000	500,000	2,100,000		2,100,000		2,100,000
New Session/s	15,000	20,000	20,000	115,000		115,000		115,000
<b>HARDWARE</b>								
Form Factor	1U rack mount	1U rack mount		1U rack mount				
Copper Ethernet NICs	8x1 GbE	8x1 GbE	8x1 GbE	12x1 GbE	12x1 GbE	8x1 GbE	8x1 GbE	8x1 GbE
Fiber NICs (SFP)	-	-	4x1 GbE	-	-	4x1 GbE	4x1 GbE	-
Fiber NICs (SFP+)	-	-	-	-	-	-	-	2x10 GbE
Power Supply	Single, internal	Single, internal	Dual Hot Swap	Single Internal	Dual Hot Swap	Single, internal	Dual Hot Swap	Dual Hot Swap
<b>FEATURES</b>								
Firewall incl. IPS	•	•	•	•	•	•	•	•
Application Control	•	•	•	•	•	•	•	•
Dynamic Routing	•	•	•	•	•	•	•	•
Application-based Provider Selection	•	•	•	•	•	•	•	•
Client-to-Site and Site-to-Site VPN (unlimited)	•	•	•	•	•	•	•	•
SSL Interception	•	•	•	•	•	•	•	•
SD-WAN	•	•	•	•	•	•	•	•
Web Filter	•	•	•	•	•	•	•	•
Zero-Touch Deployment	•	•	•	•	•	•	•	•
Advanced Threat Protection	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional
Malware Protection	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional
Advanced Threat and Malware Protection	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional
Advanced Remote Access	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional
Total Protect / Total Protect PLUS	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional

HIGH-END MODELS	F800 SUBMODELS			F900 SUBMODELS				F1000 SUBMODELS		
	CCC	CCF	CCE	CCC	CCE	CFE	CFEQ	CE0	CE2	CFE
<b>PERFORMANCE</b>										
Firewall Throughput <sup>1</sup>	30 Gbps			35 Gbps		45 Gbps		40 Gbps		
VPN Throughput <sup>2</sup>	7.5 Gbps			9.3 Gbps		13.5 Gbps		10 Gbps		
IPS Throughput <sup>3</sup>	8.3 Gbps			11.3 Gbps		13 Gbps		13 Gbps		
NGFW Throughput <sup>4</sup>	7.7 Gbps			8.0 Gbps		12 Gbps		10.2 Gbps		
Threat Protection Throughput <sup>5</sup>	7.6 Gbps			8.0 Gbps		11.5 Gbps		4.0 Gbps		
Concurrent Sessions	2,500,000			4,000,000		4,000,000		10,000,000		
New Session/s	180,000			190,000		190,000		250,000		
<b>HARDWARE</b>										
Form Factor	1U rack mount			1U rack mount				2U rack mount		
Copper Ethernet NICs	24x1 GbE	16x1 GbE	16x1 GbE	32x1 GbE	16x1 GbE	8x1 GbE	8x1 GbE	16x1 GbE	32x1 GbE	16x1 GbE
Fiber NICs (SFP)	-	8x1 GbE	-	-	-	8x1 GbE	8x1 GbE	-	-	16x1 GbE
Fiber NICs (SFP+)	-	-	4x10 GbE	-	8x10 GbE	8x10 GbE	4x10 GbE	4x10 GbE	8x10 GbE	8x10 GbE
Fiber NICs (QSFP+)	-	-	-	-	-	-	2x40 GbE	-	-	-
Power Supply	Dual Hot Swap			Dual Hot Swap				Dual Hot Swap		
<b>FEATURES</b>										
Firewall incl. IPS	•	•	•	•	•	•	•	•	•	•
Application Control	•	•	•	•	•	•	•	•	•	•
Dynamic Routing	•	•	•	•	•	•	•	•	•	•
Application-based Provider Selection	•	•	•	•	•	•	•	•	•	•
Client-to-Site and Site-to-Site VPN (unlimited)	•	•	•	•	•	•	•	•	•	•
SSL Interception	•	•	•	•	•	•	•	•	•	•
SD-WAN	•	•	•	•	•	•	•	•	•	•
Web Filter	•	•	•	•	•	•	•	•	•	•
Zero-Touch Deployment	•	•	•	•	•	•	•	•	•	•
Advanced Threat Protection	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional
Malware Protection	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional
Advanced Threat and Malware Protection	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional
Advanced Remote Access	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional
Total Protect / Total Protect PLUS	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional

All performance values are measured under optimized conditions and are to be considered as „up to“ values and may vary depending on system configuration and infrastructure:

<sup>1</sup> Firewall throughput measured with large packets (MTU1500) UDP packets, bi-directional across multiple ports, utilizing highest available port density.

<sup>2</sup> VPN performance is based on 1415 Byte UDP packets, bidirectional using BreakingPoint traffic generator.

<sup>3</sup> IPS throughput is measured using large packets (MTU1500) UDP traffic and across multiple ports, utilizing highest available port density.

<sup>4</sup> NGFW throughput is measured with IPS, application control, and web filter enabled, based on BreakingPoint Realworld-IPS-Enterprise-Traffic-Mix, bidirectional across multiple ports, utilizing highest available port density.

<sup>5</sup> Threat Protection throughput is measured with IPS, application control, web filter, and antivirus enabled, based on BreakingPoint Realworld-IPS-Enterprise-Traffic-Mix, bidirectional across multiple ports.

Specifications subject to change without notice.



# Get Started in the Cloud with Barracuda's **Cloud Ready** Initiative

Become **Cloud Ready** and accelerate your journey to the cloud with our **complimentary 90-day** cloud security licenses.

[barracuda.com/cloudready](https://barracuda.com/cloudready)

