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#### ANEXO VII PROPOSTA E ESPECIFICAÇÕES DO OBJETO

PROPOSTA COMERCIAL

A Prefeitura Municipal de Itarana.

A/C Setor de Licitações

Ref.: Pregão Eletrônico Nº 14/2019

Senhor Pregoeiro: Marcelo Rico Magnago

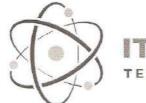
Proposta que faz a empresa IT NEXT TECNOLOGIA EIRELI inscrita no CNPJ 23.010.049/000<sup>1/2</sup>-20 no e inscrição estadual N° 083.121.24-2, para objeto da licitação acima referenciada, e abaixo discriminada.

LOTE 01							
Item	Especificação	Und	Qtd	MARCA/MOD ELO	Valor Unitário	Valor Total	
9	Item 1 – Sistema de Firewall DPI (Deep Packet Inspection) – características técnicas.						
	Em appliance com no máximo 2U de altura, com kit de montagem em rack de 19". A solução deverá utilizar a tecnologia de firewall Stateful Packet Inspection com Deep Packet Inspection (suportar a inspeção da área de dados do pacote) para filtragem de tráfego IP. Mínimo de 512 MB de memória RAM						
1	Memória Flash para armazenamento do sistema operacional de no mínimo 32 MB. Sistema Operacional do Tipo "Harderizado" não serão aceitos. Apenas os que forem armazenados em memória flash. Fonte de alimentação interna ou externa com operação automática entre 110/220V. Possuir no mínimo 7 (set) interfaces 10/100/1000Base-TX autosense, operando em half/full duplex, com inversão automática de polaridade configuráveis pelo administrador do firewall para atender as funções de: a) Segmento WAN, ou externo. b) Segmento WAN, secundário com possibilidade de	Und	1	SONICWALL TZ400	R\$ 45.719,00	R\$ 45.719,00	
	ativação de recurso para redundância de WAN com balanceamento de carga e WAN Failover por aplicação. O equipamento deverá suportar no mínimo balanceamento de 4 links utilizando diferentes métricas pré-definidas pelo sistema;				ч. Т		
	<ul> <li>c) Segmento LAN ou rede interna;</li> <li>d) Segmento LAN ou rede interna podendo ser configurado como DMZ (Zona desmilitarizada);</li> <li>e) Segmento LAN ou rede interna ou Porta de sincronismo para funcionamento em alta</li> </ul>						
	disponibilidade; f) Segmento ou Zona dedicada para controle de dispositivos Wireless dedicado com controle e configuração destes dispositivos.						

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	Performance de Firewall SPI (Stateful Packet					-	
	Inspection) igual ou superior a 600 mbps.						
	* Metodologia de teste: Performance de analise será						
	baseada na RFC 2544 (para firewall)						
	Performance de Gateway de Antivírus integrado no						
	mesmo appliance sem nenhuma limitação para analise						
	de diferentes tamanhos de arquivos: 115mbps ou						
	superior.						
	Não serão permitidas soluções baseadas em						
	redirecionamento de tráfego para dispositivos			\$			
	externos ao appliance para analise de arquivos ou			100			
	pacotes de dados.						
	A atualização das assinaturas deverá ocorrer de forma		1				
	automática sem nenhuma intervenção humana.						
	Performance de IPS de 190 Mbps ou superior.						
	Não serão permitidas soluções baseadas em						
2	redirecionamento de tráfego para dispositivos						
	externos ao appliance para analise de arquivos ou						
	pacotes de dados.						
	A atualização das assinaturas deverá ocorrer						
	automaticamente sem a necessidade de intervenção						
	humana.	1					
	Caso o fornecedor não possa comprovar este item em						
	documentações públicas, o mesmo deverá						
	comprometer-se que tais testes comprovatórios serão						
	dados em bancada com ejetor de pacotes.						
	Capacidade mínima de conexões suportadas em modo						
	firewall deverá ser de 80.000 ou superior.						
	Suportar no mínimo 2.000 novas conexões por						
	segundo. Suportor no mínimo 25 introfesor de los (2021)						
	Suportar no mínimo 25 interfaces de vlan (802.1q)						
	suportando a definição de seus endereços IP através da interface gráfica;						
	Suportar no mínimo túneis VPN IPSEC do tipo site-to-						
	site já licenciadas;						
	Suportar no mínimo 25 túneis VPN IPSEC do tipo						
	client-to-site sendo no mínimo 2 (Duas) delas já						
	licenciadas:						
	Suportar no mínimo 2 conexões clientes do tipo SSL						
	sem custo e 10 licenças/conexões futuras baseadas			14	34.		
	em licenciamento adicional:						
	Não possuir limitação lógica na capacidade nós;						
	Suportar no mínimo 100 usuários autenticados com						
	serviços ativos e identificados pelo dispositivo de						
	segurança de forma transparente ao mesmo, sem que						
	seja solicitada um segundo método de autenticação						1
	como browser ou instalação de agentes em cada						
	estação de trabalho em um único dispositivo. Políticas						
	baseadas por grupos de usuários deverão ser						
	suportadas por este dispositivo;						
	Possuir porta console (serial) para possíveis						
	manutenções no produto;						





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Possibilitar o controle do tráfego para os protocolos		1				1 9 5 1 1	- 13
TCP, UDP e ICMP baseados nos endereços de origem e							
destino e no serviço utilizado em uma comunicação;							
Possibilitar o controle sobre aplicações de forma							
granular com criação de políticas sobre o fluxo de							
dados de entrada, saída ou ambos e;							
Devem ser aplicados por usuário e por grupo e;							
Associado sua ação políticas de horários e dias da							
semana e;							
Podem ser associados a endereçamento IP baseados				3			
em sub-redes e;							
Permitindo a restrição de arquivos por sua extensão e							
bloqueio de anexos através de protocolos SMTP e							
POP3 baseado em seus nomes ou tipos mime;							
Permitir a filtragem de e-mails pelo seu conteúdo,							
através da definição de palavras-chave e a sua forma							
de pesquisa;	8						
Prover matriz de horários que possibilite o bloqueio de							
serviços com granularidade baseada em hora,							
minutos, dia, dias da semana, mês e ano que a ação							
deverá ser tomada.							
O appliance deve permitir a utilização de políticas de							
Anti-Virus, Anti-Spyware e IPS/IDP e filtro de Conteúdo							
segmentos (todos os serviços devem ser suportados							
no mesmo segmento) ou por zonas de acesso ou							
VLANS.							
Ter capacidade de análise Forense e profunda de							
pacotes com alta capacidade de processamento sem a							
perca e descarte de pacotes.	1						
Possuir flexibilidade para liberar aplicações da							
inspeção profunda de pacotes, ou seja, excluir a							
aplicação da checagem de IPS, Gateway							
Antivirus/AntiSpyware.		1.1					
Possibilitar o controle do tráfego para os protocolos GRE, H323, SIP e IGMP baseados nos endereços							
origem e destino da comunicação;							
Prover mecanismo contra-ataques de falsificação de							
endereços (IP Spoofing) através da especificação da							
interface de rede pela qual uma comunicação deve se							
originar;					14		
Prover mecanismos de proteção contra-ataques							
baseados em "DNS Rebinding" protegendo contra		1					
códigos embutidos em páginas Web com base em			-				
JavaScript, Flash e base Java com "malwares". O							
recurso deverá prevenir ataques e analises aos							
seguintes enderecos:							
D Node-local address 127.0.0.1	1.00						
E Link-local address 169.254.0.0/24						5	
Multicast address 224.0.0.0/24							
Il Host que pertence há alguma das sub-nets							
conectadas a: LAN, DMZ ou WLAN.							



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T	Prover servidor DHCP Interno suportando múltiplos					Página	4
	escopos de endereçamento para a mesma interface e						
	a funcionalidade de DHCP Relay;						
	Prover a capacidade de encaminhamento de pacotes						
	UDPs multicast/broadcast entre diferentes interfaces						
	e zonas de segurança como como IP Helper						
	suportando os protocolos e portas:						
	Time service—UDP porta 37						
	DNS-UDP porta 53						
	DHCP—UDP portas 67 e 68			3			
	Net-Bios DNS—UDP porta 137			222			
	Net-Bios Datagram—UDP porta 138						
	Wake On LAN—UDP porta 7 e 9						
	mDNS—UDP porta 5353						
	Possuir mecanismo de forma a possibilitar o					7	
	funcionamento transparente dos protocolos FTP, Real						
	Áudio, Real Vídeo, SIP, RTSP e H323, mesmo quando						
	acessados por máquinas através de conversão de						
	endereços. Este suporte deve funcionar tanto para						
	acessos de dentro para fora quanto de fora para						
	dentro;						
	Implementar mecanismo de sincronismo de horário						
	através do protocolo NTP. Para tanto o appliance deve						
	realizar a pesquisa em pelo menos 03 servidores NTP						
	distintos, com a configuração do tempo do intervalo						
	de pesquisa;						
	Prover mecanismo de conversão de endereços (NAT),						
	de forma a possibilitar que uma rede com endereços						
	reservados acesse a Internet a partir de um único						
	endereço IP e possibilitar também um mapeamento 1-						
	1 de forma a permitir com que servidores internos						
	com endereços reservados sejam acessados						
	externamente através de endereços válidos;						
	Permitir, sobre o recurso de NAT, o balanceamento						
	interno de servidores e suas aplicações sem a						
	necessidade de inserção de um equipamento como						
	switches de que atuam entre as camadas 4 (quatro) e						
	7 (sete) do modelo ISO/OSI.						
	Possuir mecanismo que permita que a conversão de			5			
	endereços (NAT) seja feita de forma dependente do			8	153.2		
	destino de uma comunicação, possibilitando que uma						
	máquina, ou grupo de máquinas, tenham seus						
	endereços convertidos para endereços diferentes de						
	acordo com o endereço destino;						
	Possuir mecanismo que permita conversão de portas						
	(PAT);						
	Possuir gerenciamento de tráfego inboud e outbound	*					
	por serviços, endereços IP e regra de firewall,						
	permitindo definir banda mínima garantida e máxima						
	permitida em porcentagem (%) para cada regra						
	definida.						
	Possuir controle de número máximo de sessões TCP,						
	prevenindo a exaustão de recursos do appliance e Avenida Eudes Scherrer de Souza, 2162 – Mont						

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permitindo a definição de um percentual do número total de essões disponíveis que podem servilitadas para uma determinada conexão definida por regra de acceso. Implementar 802.1p e classe de serviços CoS (Class of Service) de DSCP (Differentiated Services Code Points); Permitir remarcação de pacotes utilizando TOS e/ou DSCP; Possuir suporte ao protocolos MMP, através de MIB2; Possuir suporte ao protocolos de roteamento RIP e OSPF, com configuração pela interface gráfica; Suportar políticas de roteamento sobre conexões VPN IPSEC do tipo site-to-site com diferentes metricas e serviços. A rota poderá prover aos susários diferentes caminhos redundantes sobre todas as conexões VPN IPSEC, do tipo site-to-site de Ky, Certificados digitalis e XAUTH client authentication; Permitir a definição de um gateway redundante para terminação de VPN no caso de queda do primário; Permitir a drinção de uperfis de administração de forma a posibilitar a definição de diversos administradores para o firewall, cada um responsável por determinadas tarefas ad administração; Possuir mecanismo que permita a realização de cojas de segurança (tackuço) e sua posicior restauração remotamente, através da interface gráfica, sem necessidade de ser einicializar o sistema; Possuir mecanismo que peran el frevall reda todas as conexões CPC e sessões UDP que se encontrem ativas através do firevall. Permitir a visualização em tempo real, representando os serviços estatuisticação de correções e atualização em tempo real, representando os serviços as estáticas do uso de CPU do appliance o através da interface gráfica remota em tempo reaj; Possuir mecanismo para possibilitar a osistema; Permitir a visualização de terapor teral de todas as conexões to F2 e sessões UDP que se encontrem ativas através do firewall. Permitir a visualização de terapor teral de todas as conexões e sessões TCP e UDP devem ser replicadãos de forma integral sem restrições de os actado das conexões e sessões TCP e UDP devem ser replicadas de forma integral sem restrições de serviços				Página   5
administração do firewall a partir do console ou	<ul> <li>total de sessões disponíveis que podem ser utilipara uma determinada conexão definida por reacesso.</li> <li>Implementar 802.1p e classe de serviços CoS (C Service) de DSCP (Differentiated Services Code Permitir remarcação de pacotes utilizando TOS DSCP;</li> <li>Possuir suporte ao protocolo SNMP, através de Possui suporte ao protocolos de roteamento 1 OSPF, com configuração pela interface gráfica;</li> <li>Suportar políticas de roteamento sobre conexõ</li> <li>IPSEC do tipo site-to-site com diferentes métric serviços. A rota poderá prover aos usuários dife caminhos redundantes sobre todas as conexõe: IPSEC.</li> <li>Implementar os esquemas de troca de chaves re IKE e IKEv2 por Pré-Shared Key, Certificados dig XAUTH client authentication;</li> <li>Permitir a definição de um gateway redundante terminação de VPN no caso de queda do primá Permitir a criação de perfis de administração i de forma a possibilitar a definição de diversos administradores para o firewall, cada um respo por determinadas tarefas da administração;</li> <li>Possuir mecanismo que permita a realização de de segurança (backups) e sua posterior restaura remotamente, através da interface gráfica;</li> <li>Permitir a visualizaçõe om tempo real de todas conexões TCP e sessões UDP que se encontrem através do firewall.</li> <li>Permitir a geração de gráficos em tempo real, representando os serviços mais utilizados e as máquinas mais acessadas em um dado momen Permitir a visualização de setatísticas do uso de do appliance o através da interface gráfica rem tempo real;</li> <li>Possuir mecanismo de Alta Disponibilidade, cor implementações de Fail Over e Load Balance o estad conexões de sessões TCP e UDP devem ser replix de forma integral sem restrições de serviços co exemplo, tráfego multicast.</li> </ul>	zadas gra de lass of Points); e/ou MIB2; RIP e es VPN as e grentes s VPN nanual, itais e e para rio; stintos, nsável e cópias ação de mente as ativas to; c CPU ota em m as endo do das radas mo, por		Página   <b>5</b>

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Página |6 Implementar proxy transparente para o protocolo HTTP, de forma a dispensar a configuração dos browsers das máquinas clientes. Suportar recurso de autenticação única para todo o ambiente de rede, ou seja, utilizando a plataforma de autenticação atual que pode ser de LDAP ou AD; o perfil de cada usuário deverá ser obtido automaticamente através de regras no Firewall DPI (Deep Packet Inspection) sem a necessidade de uma nova autenticação como por exemplo, para os serviços de navegação a Internet atuando assim de forma toda transparente ao usuário. Serviços como FTP, HTTP, HTTPS devem apenas consultar uma base de dados de usuários e grupos de servidores 2008/2012 com AD; QUANTO AS CERTIFICAÇÕES: Possuir certificações ICSA para Firewall 4.1 e VPNC. AUTENTICAÇÃO a) Prover autenticação de usuários para os serviços Telnet, FTP, HTTP, HTTPS e Gopher, utilizando as bases de dados de usuários e grupos de servidores NT e Unix, de forma simultânea: b) Permitir a utilização de LDAP. AD e RADIUS c) Permitir o cadastro manual dos usuários e grupos diretamente na interface de gerencia remota do Firewall, caso onde se dispensa um autenticador remoto para o mesmo; d) Permitir a integração com qualquer autoridade certificadora emissora de certificados X509 que seguir o padrão de PKI descrito na RFC 2459, inclusive verificando as CRLs emitidas periodicamente pelas autoridades, que devem ser obtidas automaticamente pelo firewall via protocolos HTTP e LDAP; e) Permitir o controle de acesso por usuário, para plataformas Windows Me, NT, 2000, 2000, XP de forma transparente, para todos os serviços suportados, de forma que ao efetuar o logon na rede, um determinado usuário tenha seu perfil de acesso automaticamente configurado; f) Possuir perfis de acesso hierárquicos; e g) Permitir a restrição de atribuição de perfil de acesso a usuário ou grupo independente ao endereço IP da máquina que o usuário esteja utilizando. h) Suportar padrão IPSEC, de acordo com as RFCs 2401 a 2412, de modo a estabelecer canais de criptografia com outros produtos que também suportem tal padrão: i) Suportar a criação de túneis IP sobre IP (IPSEC Tunnel), de modo a possibilitar que duas redes com endereço inválido possam se comunicar através da Internet: WWW: a) Possuir módulo integrado ao mesmo Firewall ips (Deep Packet Inspection) para classificação de páginas Avenida Eudes Scherrer de Souza, 2162 - MontSerrat Office, Sala 428, Bairro Colina de Laranjeiras - Serra - ES

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web com no mínimo 56 categorias distintas, com mecanismo de atualização automática. b) Deverão ser fornecidas licenças de Filtro de Conteúdo com validade de xxx anos para cada equipamento e quantidade de usuários ilimitada, a			Página <b> 7</b>	
contar da data de sua ativação. c) Controle de conteúdo filtrado por categorias de filtragem com base de dados continuamente atualizada e extensível; d) Capacidade de submissão instantânea de novos sites e palavras chaves;		3		
<ul> <li>e) Permitir a classificação dinâmica de sites Web, URLs</li> <li>e domínios;</li> <li>f) Suporte a filtragem para, no mínimo, 56 categorias e</li> </ul>	14.			
<ul> <li>com, pelo menos, as seguintes categorias: violência, nudismo, roupas intimas/banho, pornografia, armas, ódio / racismo, cultos / ocultismo,drogas / drogas ilegais, crimes / comportamento ilegal, educação sexual, jogos, álcool / tabagismo, conteúdo adulto, conteúdo questionável, artes e entretenimento, bancos / e-trading, chat, negócios e economia, tecnologia de computadores e Internet, e-mail pessoal, jogos de azar , hacking, humor, busca de empregos, newsgroups, encontros pessoais, restaurantes / jantar, portais de busca, shopping e portais de compras, MP3, download de software, viagens e WEB hosting;</li> <li>g) O administrador de política de segurança poderá definir grupos de usuários e diferentes políticas de filtragem de sites WEB, personalizando quais categorias deverão ser bloqueadas ou permitidas para cada grupo de usuários, podendo ainda adicionar ou retirar acesso a domínios específicos da Internet;</li> <li>h) O administrador de política de segurança poderá personalizar quais zonas de segurança, em</li> </ul>				
<ul> <li>cada um dos firewalls da rede, terão aplicadas as políticas de filtragem de WEB, e de maneira centralizada;</li> <li>i) O administrador poderá adicionar filtros por palavra-chave de modo específico e individual em cada um dos firewalls da rede, de forma centralizada;</li> <li>j) A política de Filtros de conteúdo deverá ser baseada em horário do dia e dia da semana.</li> <li>k) Suportar recurso de autenticação única para todo o ambiente de rede, ou seja, utilizando a plataforma de</li> </ul>				
autenticação atual que pode ser de LDAP ou AD; o perfil de cada usuário deverá ser obtido automaticamente para o controle das políticas de Filtro de Conteúdo sem a necessidade de uma nova autenticação.		) I		



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	l) Possibilitar a filtragem da linguagem Javascript e de					ragina o	-
	applets Java e Active-X em páginas WWW, para o						
	protocolo HTTP;						
	ADMINISTRAÇÃO						
	a) Permitir a criação de perfis de administração						
	distintos, de forma a possibilitar a definição de		1				
	diversos administradores para o firewall, cada um						
	responsável por determinadas tarefas da						
	administração;						
	b) Fornecer gerência remota, com interface gráfica			1			
	nativa, através do aplicativo ActiveX ou Java.						
	c) A interface gráfica deverá possuir mecanismo que						
	permita a gerência remota de múltiplos firewalls sem						
	a necessidade de se executar várias interfaces;	-					
	d) A interface gráfica deverá possuir assistentes para						
	facilitar a configuração inicial e a realização das tarefas						
	mais comuns na administração do firewall, incluindo a						
	configuração de VPN IPSECs, NAT, perfis de acesso e						
	regras de filtragem;						
	e) Possuir mecanismo que permita a realização de						
	cópias de segurança (backups) e sua posterior						
	restauração remotamente, através da interface						
	gráfica, sem necessidade de se reinicializar o sistema;						
	<ul> <li>f) Possuir mecanismo para possibilitar a aplicação de</li> </ul>						
	correções e atualizações para o firewall remotamente						
	através da interface gráfica;						
	g) Permitir a visualização em tempo real de todas as						
	conexões TCP e sessões UDP que se encontrem ativas						
	através do firewall e a remoção de qualquer uma						
	destas sessões ou conexões;						
	h) Permitir a geração de gráficos em tempo real,						
	representando os serviços mais utilizados e as						
	máquinas mais acessadas em um dado momento;						
	<ul> <li>i) Permitir a visualização de estatísticas do uso de CPU,</li> </ul>						
	memória da máquina onde o firewall está rodando e						
	tráfego de rede em todas as interfaces do Firewall			ĝ.			
	através da interface gráfica remota, em tempo real e						
	em forma tabular e gráfica;						
	j) Permitir a conexão simultânea de vários						
	administradores, sendo um deles com poderes de				4		
	alteração de configurações e os demais apenas de						
	visualização das mesmas. Permitir que o segundo ao						
	se conectar possa enviar uma mensagem ao primeiro						
	através da interface de administração.						
	k) Possibilitar a geração de pelo menos os seguintes						
	tipos de relatório, mostrados em formato HTML:						
	máquinas mais acessadas, serviços mais utilizados,						
	usuários que mais utilizaram serviços, URLs mais						
	visualizadas, ou categorias Web mais acessadas (em						
	caso de existência de um filtro de conteúdo Web),						
	maiores emissores e receptores de e-mail;						
	<ol> <li>Possibilitar a geração de pelo menos os seguintes</li> </ol>						
	tipos de relatório com cruzamento de informações,						
_	se de relación com cruzamento de miormações,						

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IT NEXT

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mostrados em formato HTML: máquinas acessadas X serviços bloqueados, usuários X URLs acessadas, usuários X categorias Web bloqueadas (em caso de utilização de um filtro de conteúdo Web); m) Possibilitar a geração dos relatórios sob demanda e através de agendamento diário, semanal e mensal. No caso de agendamento, os relatórios deverão ser publicados de forma automática em pelo menos três servidores web diferentes, através do protocolo FTP; LOG a) Possibilitar o registro de toda a comunicação realizada através do firewall, e de todas as tentativas de abertura de sessões ou conexões que forem recusadas pelo mesmo; b) Prover mecanismo de consulta às informações registradas integrado à interface de administração; c) Possibilitar o armazenamento de seus registros (log e/ou eventos) na mesma plataforma de gerenciamento e descrito no item ADMINISTRAÇÃO. d) Possibilitar a recuperação dos registros de log e/ou eventos armazenados em máquina remota, através de protocolo criptografado, de forma transparente através da interface gráfica; e) Possibilitar a análise dos seus registros (log e/ou eventos) por pelo menos um programa analisador de log disponível no mercado: f) Possuir sistema de respostas automáticas que possibilite alertar imediatamente o administrador através de e-mails, janelas de alerta na interface gráfica, execução de programas e envio de Traps SNMP: g) Possuir mecanismo que permita inspecionar o tráfego de rede em tempo real (sniffer) via interface gráfica, podendo opcionalmente exportar os dados visualizados para arquivo formato PCAP e permitindo a filtragem dos pacotes por protocolo, endereço IP origem e/ou destino e porta IP origem e/ou destino, usando uma linguagem textual; h) Permitir a visualização do tráfego de rede em tempo real tanto nas interfaces de rede do Firewall quando nos pontos internos do mesmo: anterior e

### posterior à filtragem de pacotes, onde o efeito do NAT (tradução de endereços) é eliminado;

#### Treinamento

Fornecer treinamento durante 16 horas para capacitar até 2 (dois) técnicos em todas as funcionalidades exigidas nos descritivos para gerenciamento do firewall solicitado (Appliance, funcionalidades e gerenciamento).

Ao final do treinamento todos os alunos instruídos deverão receber provas e executar testes para

Avenida Eudes Scherrer de Souza, 2162 – MontSerrat Office, Sala 428, Bairro Colina de Laranjeiras - Serra - ES CNPJ: 23.010.049/00001-20 – IE: 083.121.24-2



	Página
verificar total capacitação de gerenciamento de todas	
as funcionalidades do firewall de acordo com as	
normas e melhores práticas do fabricante.	

Valor Total: R\$ 45.179,00 (Quarenta e cinco mil e setecentos e dezenove reais)

Igualmente, declaramos que:

a) Esta proposta e valida por 60 (sessenta) dias, contados da data de sua apresentação.

b) Será responsável pela relação negocial de nossa empresa com a Prefeitura Municipal de Itarana a pessoa do Sr. (a) Reginaldo José Aniceto, portador (a) da cédula de identidade N° 818.955 ES e do CPF N° 001.802.347-90 com endereço Rua da Aldeia – 220 Bairro: Laranjeiras, Casa J41, telefone (27) 3064-2200 e e-mail itnexttecnologia@gmail.com.

c) Tomamos conhecimento e concordamos integralmente com todas as condições estabelecidas neste Edital, inclusive seus anexos, obrigando-se ao cumprimento de todas as exigências nele contidas.

Serra, 9 de dezembro de 2019

Reginaldo Jòsé Aniceto Procurador IT NEXT TECNOLOGIA

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### ATESTADO DE CAPACIDADE TÉCNICA

A MEGA MOTORS LTDA, inscrita no CNPJ n° 28.918.287/0001-52, atesta para os devidos fins que a empresa IT NEXT TECNOLOGIA EIRELI, inscrita no CNPJ n° 23.010.049/0001-20, forneceu 1 (um) sonicwall TZ600 com garantia/suporte de 36 meses, instalou e configurou os equipamentos de acordo com o solicitado. Conforme pn's abaixo;

- 01-SSC-0210 SONICWALL TZ600
- 01-SSC-0248 3 ANOS DE SUPORTE 24X7 PARA O TZ600 SERIES

Atestamos ainda que os compromissos assumidos pela empresa foram cumpridos satisfatoriamente, nada constando em nossos arquivos que o desabone comercialmente e/ou tecnicamente.

Serra, 20 de abril de 2019

Silvio Cesar de Oliveira Sócio/Proprietário

Rodovia Norte Sul – N° 378

CNPJ: :

128.918.287/0001-52 MEGA MOTORS EIRELIEP



Reconheço por semelhança a firma de SILVIO CESAR DE OLIVEIRA. Serra-ES, 05/12/2019, 15:34:16. Em Test<sup>o</sup> da verdade. Tiago Santana Silva - Escrevente Selo Digital: 024547.IMC1910.41908 Emolumentos: R\$ 2,96 Encargos: R\$ 0,75 Total: R\$ 3,71 Consulte autenticidade em www.tjes.jus.br - Func: Tiago Santana Silva

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# SONICWALL

# SonicWall TZ series

Integrated threat prevention and SD-WAN platform for small/medium organizations and distributed enterprises

The SonicWall TZ series enables small to mid-size organizations and distributed enterprises realize the benefits of an integrated security solution that checks all the boxes. Combining high-speed threat prevention and software-defined wide area networking (SD-WAN) technology with an extensive range of networking and wireless features plus simplified deployment and centralized management, the TZ series provides a unified security solution at a low total cost of ownership.

#### Flexible, integrated security solution

The foundation of the TZ series is SonicOS. SonicWall's feature-rich operating system. SonicOS includes a powerful set of capabilities that provides organizations with the flexibility to tune these Unified Threat Management (UTM) firewalls to their specific network requirements. For example, creating a secure high-speed wireless network is simplified through a built-in wireless controller and support for the IEEE 802.11ac standard or by adding our SonicWave 802.11ac Wave 2 access points. To reduce the cost and complexity of connecting high-speed wireless access points and other Power over Ethernet (PoE)-enabled devices such as IP cameras, phones and printers, the TZ300P and TZ600P provide PoE/PoE+ power.

Distributed retail businesses and campus environments can take advantage of the many tools in SonicOS to gain even greater benefits.

Branch locations are able to exchange information securely with the central office using virtual private networking (VPN). Creating virtual LANs (VLANs) enables segmentation of the network into separate corporate and customer groups with rules that determine the level of communication with devices on other VLANs. SD-WAN offers a secure alternative to costly MPLS circuits while delivering consistent application performance and availability. Deploying TZ firewalls to remote locations is easy using Zero-Touch Deployment which enables provisioning of the firewall remotely through the cloud.

# Superior threat prevention and performance

Our vision for securing networks in today's continually-evolving cyber threat landscape is automated, realtime threat detection and prevention. Through a combination of cloud-based and on-box technologies we deliver protection to our firewalls that's been validated by independent third-party testing for its extremely high security effectiveness. Unknown threats are sent to SonicWall's cloud-based Capture Advanced Threat Protection (ATP) multiengine sandbox for analysis. Enhancing Capture ATP is our patent-pending Real-Time Deep Memory Inspection (RTDMI<sup>™</sup>) technology. The RTDMI engine detects and blocks malware and zero-day threats by inspecting directly in memory. RTDMI technology is precise, minimizes false positives, and identifies and mitigates sophisticated



#### **Benefits:**

#### Flexible, integrated security solution

- Secure SD-WAN
- Powerful SonicOS operating system
- High-speed 802.11ac wireless
- Power over Ethernet (PoE/PoE+)
- Network segmentation with VLANs

### Superior threat prevention and performance

- Patent-pending real-time deep memory inspection technology
- Patented reassembly-free deep packet inspection technology
- On-box and cloud-based threat prevention
- TLS/SSL decryption and inspection
- Industry-validated security effectiveness
- Dedicated Capture Labs threat research team
- Endpoint security with Capture Client

### Easy deployment, setup and ongoing management

- Zero-Touch Deployment
- Cloud-based and on-premises centralized management
- Scalable line of firewalls
- Low total cost of ownership

attacks where the malware's weaponry is exposed for less than 100 nanoseconds. In combination, our patented single-pass Reassembly-Free Deep Packet Inspection (RFDPI) engine examines every byte of every packet, inspecting both inbound and outbound traffic directly on the firewall. By leveraging Capture ATP with RTDMI technology in the SonicWall Capture Cloud Platform in addition to on-box capabilities including intrusion prevention, anti-malware and web/ URL filtering, TZ series firewalls stop malware, ransomware and other threats at the gateway. For mobile devices used outside the firewall perimeter. SonicWall Capture Client provides an added layer of protection by applying advanced threat protection techniques such as machine learning and system rollback. Capture Client also leverages the deep inspection of encrypted TLS traffic (DPI-SSL) on TZ series firewalls by installing and managing trusted TLS certificates.

The continued growth in the use of encryption to secure web sessions means it is imperative firewalls are able to scan encrypted traffic for threats. TZ series firewalls provide complete

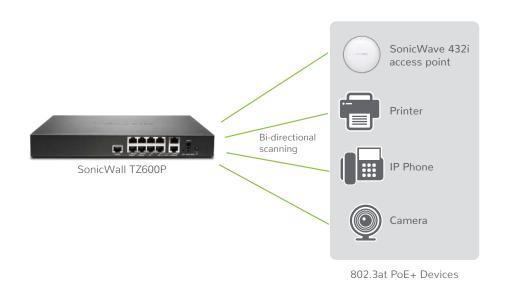
protection by performing full decryption and inspection of TLS/SSL and SSH encrypted connections regardless of port or protocol. The firewall searches for protocol non-compliance, threats, zerodays, intrusions, and even defined criteria by looking deep inside every packet. The deep packet inspection engine detects and prevents hidden attacks that leverage cryptography. It also blocks encrypted malware downloads, ceases the spread of infections and thwarts command and control (C&C) communications and data exfiltration. Inclusion and exclusion rules allow total control to customize which traffic is subjected to decryption and inspection based on specific organizational compliance and/or legal requirements.

# Easy deployment, setup and ongoing management

SonicWall makes it easy to configure and manage TZ series firewalls and SonicWave 802.11ac Wave 2 access points no matter where you deploy them. Centralized management, reporting, licensing and analytics are handled through our cloud-based Capture Security Center which offers the ultimate in visibility, agility and capacity to centrally govern the entire SonicWall security ecosystem from a single pane of glass.

A key component of the Capture Security Center is Zero-Touch Deployment. This cloud-based feature simplifies and speeds the deployment and provisioning of SonicWall firewalls at remote and branch office locations. The process requires minimal user intervention, and is fully automated to operationalize firewalls at scale in just a few steps. This significantly reduces the time, cost and complexity associated with installation and configuration, while security and connectivity occurs instantly and automatically. Together, the simplified deployment and setup along with the ease of management enable organizations to lower their total cost of ownership and realize a high return on investment.

\* 802.11ac currently not available on SOHO/SOHO 250 models; SOHO/SOHO 250 models support 802.11a/b/g/n



#### Integrated Security and Power for Your PoE-enabled Devices

Provide power to your PoE-enabled devices without the cost and complexity of a Power over Ethernet switch or injector. TZ300P and TZ600P firewalls integrate IEEE 802.3at technology to power PoE and PoE+ devices such as wireless access points, cameras, IP phones and more. The firewall scans all traffic coming from and going to each device using deep packet inspection technology and then removes harmful threats such as malware and intrusions, even over encrypted connections.

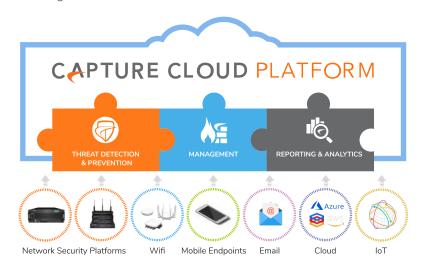


#### **Capture Cloud Platform**

SonicWall's Capture Cloud Platform delivers cloud-based threat prevention and network management plus reporting and analytics for organizations of any size. The platform consolidates threat intelligence gathered from multiple sources including our award-winning multi-engine network sandboxing service, Capture Advanced Threat Protection, as well as more than 1 million SonicWall sensors located around the globe.

If data coming into the network is found to contain previously-unseen malicious code, SonicWall's dedicated, in-house Capture Labs threat research team develops signatures that are stored in the Capture Cloud Platform database and deployed to customer firewalls for up-to-date protection. New updates take effect immediately without reboots or interruptions. The signatures resident on the appliance protect against wide classes of attacks, covering tens of thousands of individual threats. In addition to the countermeasures on the appliance, TZ firewalls also have continuous access to the Capture Cloud Platform database which extends the onboard signature intelligence with tens of millions of signatures.

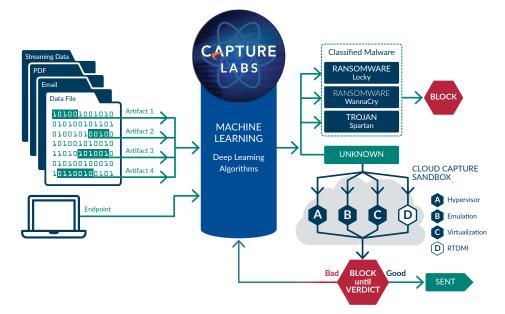
In addition to providing threat prevention, the Capture Cloud Platform offers single pane of glass management and administrators can easily create both real-time and historical reports on network activity.



Advanced threat protection

At the center of SonicWall automated, real-time breach prevention is SonicWall Capture Advanced Threat Protection service, a cloud-based multi-engine sandbox that extends firewall threat protection to detect and prevent zeroday threats. Suspicious files are sent to the cloud where they are analyzed using deep learning algorithms with the option to hold them at the gateway until a verdict is determined. The multiengine sandbox platform, which includes Real-Time Deep Memory Inspection, virtualized sandboxing, full system emulation and hypervisor level analysis technology, executes suspicious code and analyzes behavior. When a file is identified as malicious, it is blocked and a hash is immediately created within Capture ATP. Soon after, a signature is sent to firewalls to prevent follow-on attacks.

The service analyzes a broad range of operating systems and file types, including executable programs, DLL, PDFs, MS Office documents, archives, JAR and APK. For complete endpoint protection, the SonicWall Capture Client combines nextgeneration anti-virus technology with SonicWall's cloud-based multi-engine sandbox with optional integration with SonicWall firewalls.



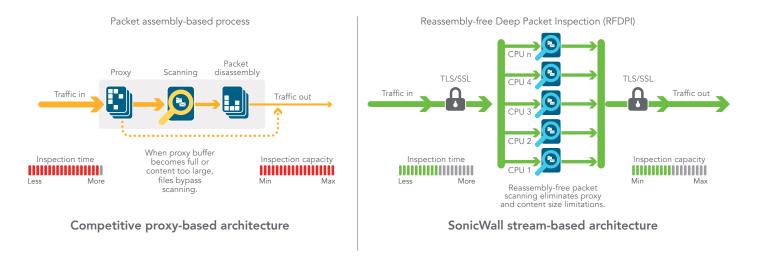


# Reassembly-Free Deep Packet Inspection engine

The SonicWall Reassembly-Free Deep Packet Inspection (RFDPI) is a singlepass, low latency inspection system that performs stream-based, bi-directional traffic analysis at high speed without proxying or buffering to effectively uncover intrusion attempts and malware downloads while identifying application traffic regardless of port and protocol. This proprietary engine relies on streaming traffic payload inspection to detect threats at Layers 3-7, and takes network streams through extensive and repeated normalization and decryption in order to neutralize advanced evasion techniques that seek to confuse detection engines and sneak malicious code into the network.

Once a packet undergoes the necessary pre-processing, including TLS/SSL decryption, it is analyzed against a single, proprietary memory representation of three signature databases: intrusion attacks, malware and applications. The connection state is then advanced to represent the position of the stream relative to these databases until it encounters a state of attack, or other "match" event, at which point a pre-set action is taken.

In most cases, the connection is terminated and proper logging and notification events are created. However, the engine can also be configured for inspection only or, in case of application detection, to provide Layer 7 bandwidth management services for the remainder of the application stream as soon as the application is identified.





# Centralized management and reporting

For highly regulated organizations wanting to achieve a fully coordinated security governance, compliance and risk management strategy, SonicWall provides administrators a unified, secure and extensible platform to manage SonicWall firewalls, wireless access points and Dell N-Series and X-Series switches through a correlated and auditable workstream process. Enterprises can easily consolidate the management of security appliances, reduce administrative and troubleshooting complexities, and govern all operational aspects of the security infrastructure, including centralized policy management and enforcement; real-time event monitoring; user activities; application identifications; flow analytics and forensics; compliance and audit reporting; and more. In addition, enterprises meet the firewall's change management requirements through workflow automation which provides the agility and confidence to deploy the right firewall policies at the right time and in conformance with compliance regulations. Available on premises as SonicWall Global Management System and in the cloud as Capture Security Center,

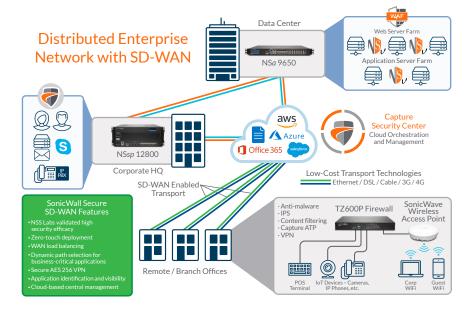
SonicWall management and reporting solutions provide a coherent way to manage network security by business processes and service levels, dramatically simplifying lifecycle management of your overall security environments compared to managing on a device-by-device basis.



#### **Distributed networks**

Because of their flexibility, TZ series firewalls are ideally suited for both distributed enterprise and single site deployments. In distributed networks like those found in retail organizations, each site has its own TZ firewall which connects to the Internet often through a local provider using a DSL, cable or 3G/4G connection. In addition to Internet access, each firewall utilizes an Ethernet connection to transport packets between remote sites and the central headquarters. Web services and SaaS applications such as Office 365, Salesforce and others are served up from the data center. Through mesh VPN technology, IT administrators can create a hub and spoke configuration for the safe transport of data between all locations.

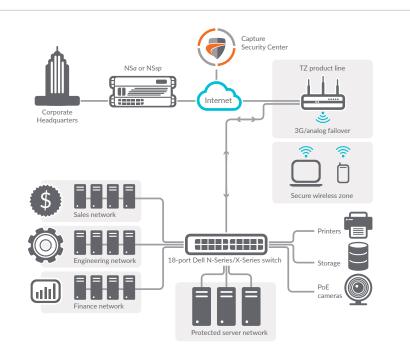
The SD-WAN technology in SonicOS is a perfect complement to TZ firewalls



deployed at remote and branch sites. Instead of relying on more expensive legacy technologies such as MPLS and T1, organizations using SD-WAN can choose lower-cost public Internet services while continuing to achieve a high level of application availability and predictable performance.

#### **Capture Security Center**

Tying the distributed network together is SonicWall's cloud-based Capture Security Center (CSC) which centralizes deployment, ongoing management and real-time analytics of the TZ firewalls. A key feature of CSC is Zero-Touch Deployment. Configuring and deploying firewalls across multiple sites is time-consuming and requires onsite personnel. However Zero-Touch Deployment removes these challenges by simplifying and speeding the deployment and provisioning of SonicWall firewalls remotely through the cloud. Similarly, CSC eases ongoing management by providing cloud-based single-pane-of-glass management for SonicWall devices on the network. For complete situational awareness of the network security environment, SonicWall Analytics offers a single-pane view into all activity occurring inside the network. Organizations gain a deeper understanding of application usage and performance while reducing the possibility of Shadow IT.



#### Single Sites

For single site deployments, having an integrated network security solution is highly beneficial. TZ series firewalls combine high security effectiveness with options such as built-in 802.11ac wireless and, in the case of the TZ300P and TZ600P, PoE/PoE+ support. The same security engine in our mid-range NSa series and high-end NSsp series is featured in TZ series firewall along with the broad feature set of SonicOS. Configuration and management is easy using the intuitive SonicOS UI. Organizations save valuable rack space due to the compact desktop form factor.



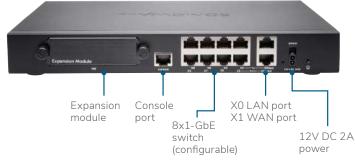
#### SonicWall TZ600 series

For emerging enterprises, retail and branch offices looking for security, performance and options such as 802.3at PoE+ support at a value price, the SonicWall TZ600 secures networks with enterprise-class features and uncompromising performance.

Specification	TZ600 series
Firewall throughput	1.9 Gbps
Threat Prevention throughput	800 Mbps
Anti-malware throughput	800 Mbps
IPS throughput	1.2 Gbps
Maximum connections	150,000
New connections/sec	12,000







#### SonicWall TZ500 series

For growing branch offices and SMBs, the SonicWall TZ500 series delivers highly effective, no-compromise protection with network productivity and optional integrated 802.11ac dual-band wireless.

Specification	TZ500 series
Firewall throughput	1.4 Gbps
Threat Prevention throughput	700 Mbps
Anti-malware throughput	700 Mbps
IPS throughput	1.0 Gbps
Maximum connections	150,000
New connections/sec	8,000







#### SonicWall TZ400 series

For small business, retail and branch office locations, the SonicWall TZ400 series delivers enterprise-grade protection. Flexible wireless deployment is available with optional 802.11ac dual-band wireless integrated into the firewall.

Specification	TZ400 series
Firewall throughput	1.3 Gbps
Threat Prevention throughput	600 Mbps
Anti-malware throughput	600 Mbps
IPS throughput	900 Mbps
Maximum connections	150,000
New connections/sec	6,000





#### SonicWall TZ350/TZ300 series

The SonicWall TZ300 and TZ350 series offer an all-in-one solution that protects networks from advanced attacks. Unlike consumer grade products, these UTM firewalls combine high-speed intrusion prevention, anti-malware and content/URL filtering plus broad secure mobile access support for laptops, smartphones and tablets along with optional integrated 802.11ac wireless. In addition, the TZ300 offers optional 802.3at PoE+ to power PoE-enabled devices.

Specification	TZ350 series	TZ300 series
Firewall throughput	1.0 Gbps	750 Mbps
Threat Prevention throughput	335 Mbps	235 Mbps
Anti-malware throughput	335 Mbps	235 Mbps
IPS throughput	400 Mbps	300 Mbps
Maximum connections	100,000	100,000
New connections/sec	6,000	5,000





#### SonicWall SOHO 250/SOHO series

For wired and wireless small and home office environments, the SonicWall SOHO 250 and SOHO series deliver the same businessclass protection large organizations require at a more affordable price point. Add optional 802.11n wireless to provide employees, customers and guests with secure wireless connectivity.

Specification	SOHO 250 series	SOHO series
Firewall throughput	600 Mbps	300 Mbps
Threat Prevention throughput	200 Mbps	150 Mbps
Anti-malware throughput	200 Mbps	150 Mbps
IPS throughput	250 Mbps	200 Mbps
Maximum connections	50,000	10,000
New connections/sec	3,000	1,800





#### **Partner Enabled Services**

Need help to plan, deploy or optimize your SonicWall solution? SonicWall Advanced Services Partners are trained to provide you with world class professional services. Learn more at <u>www.sonicwall.com/PES.</u>



Features

RFDPI ENGINE	
Feature	Description
Reassembly-Free Deep Packet Inspection (RFDPI)	This high-performance, proprietary and patented inspection engine performs stream-based, bi-directional traffic analysis, without proxying or buffering, to uncover intrusion attempts and malware and to identify application traffic regardless of port.
Bi-directional inspection	Scans for threats in both inbound and outbound traffic simultaneously to ensure that the network is not used to distribute malware and does not become a launch platform for attacks in case an infected machine is brought inside.
Stream-based inspection	Proxy-less and non-buffering inspection technology provides ultra-low latency performance for DPI of millions of simultaneous network streams without introducing file and stream size limitations, and can be applied on common protocols as well as raw TCP streams.
Highly parallel and scalable	The unique design of the RFDPI engine works with the multi-core architecture to provide high DPI throughput and extremely high new session establishment rates to deal with traffic spikes in demanding networks.
Single-pass inspection	A single-pass DPI architecture simultaneously scans for malware, intrusions and application identification, drastically reducing DPI latency and ensuring that all threat information is correlated in a single architecture.
FIREWALL AND NETWORKING	
Feature	Description
Secure SD-WAN	An alternative to more expensive technologies such as MPLS, Secure SD-WAN enables distributed enterprise organizations to build, operate and manage secure, high-performance networks across remote sites for the purpose of sharing data, applications and services using readily-available, low-cost public internet services.
REST APIs	Allows the firewall to receive and leverage any and all proprietary, original equipment manufacturer and third-party intelligence feeds to combat advanced threats such as zero-day, malicious insider, compromised credentials, ransomware and advanced persistent threats.
Stateful packet inspection	All network traffic is inspected, analyzed and brought into compliance with firewall access policies.
High availability/clustering	SonicWall TZ500 and TZ600 models support high availability with Active/Standby with state synchronization. SonicWall TZ300 and TZ400 models support high availability without Active/Standby synchronization. There is no high availability on SonicWall SOHO models.
DDoS/DoS attack protection	SYN flood protection provides a defense against DoS attacks using both Layer 3 SYN proxy and Layer 2 SYN blacklisting technologies. Additionally, it protects against DoS/DDoS through UDP/ICMP flood protection and connection rate limiting.
IPv6 support	Internet Protocol version 6 (IPv6) is in its early stages to replace IPv4. With SonicOS, the hardware will support filtering and wire mode implementations.
Flexible deployment options	The TZ series can be deployed in traditional NAT, Layer 2 bridge, wire and network tap modes.
WAN load balancing	Load-balances multiple WAN interfaces using Round Robin, Spillover or Percentage methods.
Advanced quality of service (QoS)	Guarantees critical communications with 802.1p, DSCP tagging, and remapping of VoIP traffic on the network.
H.323 gatekeeper and SIP proxy support	Blocks spam calls by requiring that all incoming calls are authorized and authenticated by H.323 gatekeeper or SIP proxy.
Single and cascaded Dell N-Series and X-Series switch management	Manage security settings of additional ports, including Portshield, HA, PoE and PoE+, under a single pane of glass using the firewall management dashboard for Dell's N-Series and X-Series network switch (not available with SOHO model).
Biometric authentication	Supports mobile device authentication such as fingerprint recognition that cannot be easily duplicated or shared to securely authenticate the user identity for network access.
Open authentication and social login	Enable guest users to use their credentials from social networking services such as Facebook, Twitter, or Google+ to sign in and access the Internet and other guest services through a host's wireless, LAN or DMZ zones using pass-through authentication.
Wireless Network Security	Available as an integrated option on SonicWall TZ300 through TZ500, IEEE 802.11ac wireless technology can deliver up to 1.3 Gbps of wireless throughput with greater range and reliability. Optional 802.11 a/b/g/n is available on SonicWall SOHO models.
MANAGEMENT AND REPORTING	
Feature	Description
Cloud-based and on-premises management	Configuration and management of SonicWall appliances is available via the cloud through the SonicWall Capture Security Center and on-premises using SonicWall Global Management System (GMS).
Powerful single device management	An intuitive web-based interface allows quick and convenient configuration, in addition to a comprehensive command-line interface and support for SNMPv2/3.
IPFIX/NetFlow application flow reporting	Exports application traffic analytics and usage data through IPFIX or NetFlow protocols for real-time and historical monitoring and reporting with tools that support IPFIX and NetFlow with extensions.



VIRTUAL PRIVATE NETWORKING	
Feature	Description
Auto-provision VPN	Simplifies and reduces complex distributed firewall deployment down to a trivial effort by automating the initial site-to-site VPN gateway provisioning between SonicWall firewalls while security and connectivity occurs instantly and automatically.
IPSec VPN for site-to-site connectivity	High-performance IPSec VPN allows the TZ series to act as a VPN concentrator for thousands of other large sites, branch offices or home offices.
SSL VPN or IPSec client remote access	Utilizes clientless SSL VPN technology or an easy-to-manage IPSec client for easy access to email, files, computers, intranet sites and applications from a variety of platforms.
Redundant VPN gateway	When using multiple WANs, a primary and secondary VPN can be configured to allow seamless, automatic failover and failback of all VPN sessions.
Route-based VPN	The ability to perform dynamic routing over VPN links ensures continuous uptime in the event of a temporary VPN tunnel failure, by seamlessly re-routing traffic between endpoints through alternate routes.
CONTENT/CONTEXT AWARENESS	
Feature	Description
User activity tracking	User identification and activity are made available through seamless AD/LDAP/Citrix1/Terminal Services1 SSO integration combined with extensive information obtained through DPI.
GeoIP country traffic identification	Identifies and controls network traffic going to or coming from specific countries to either protect against attacks from known or suspected origins of threat activity, or to investigate suspicious traffic originating from the network. Provides the ability to create custom country and Botnet lists to override an incorrect country or Botnet tag associated with an IP address. Eliminates unwanted filtering of IP addresses due to misclassification.
Regular expression DPI filtering	Prevents data leakage by identifying and controlling content crossing the network through regular expression matching. Provides the ability to create custom country and Botnet lists to override an incorrect country or Botnet tag associated with an IP address.
CAPTURE ADVANCE THREAT PROTEC	CTION
Feature	Description
Multi-engine sandboxing	The multi-engine sandbox platform, which includes virtualized sandboxing, full system emulation, and hypervisor level analysis technology, executes suspicious code and analyzes behavior, providing comprehensive visibility to malicious activity.
Real-Time Deep Memory Inspection (RTDMI)	This patent-pending cloud-based technology detects and blocks malware that does not exhibit any malicious behavior and hides its weaponry via encryption. By forcing malware to reveal its weaponry into memory, the RTDMI engine proactively detects and blocks mass-market, zero-day threats and unknown malware.
Block until verdict	To prevent potentially malicious files from entering the network, files sent to the cloud for analysis can be held at the gateway until a verdict is determined.
Broad file type and size analysis	Supports analysis of a broad range of file types, either individually or as a group, including executable programs (PE), DLL, PDFs, MS Office documents, archives, JAR, and APK plus multiple operating systems including Windows, Android, Mac OS X and multi-browser environments.
Rapid deployment of signatures	When a file is identified as malicious, a signature is immediately deployed to firewalls with SonicWall Capture ATP subscriptions and Gateway Anti-Virus and IPS signature databases and the URL, IP and domain reputation databases within 48 hours.
ENCRYPTED THREAT PREVENTION	
Feature	Description
TLS/SSL decryption and inspection	Decrypts and inspects TLS/SSL encrypted traffic on the fly, without proxying, for malware, intrusions and data leakage, and applies application, URL and content control policies in order to protect against threats hidden in encrypted traffic. Included with security subscriptions for all TZ series models except SOHO. Sold as a separate license on SOHO.
SSH inspection	Deep packet inspection of SSH (DPI-SSH) decrypts and inspect data traversing over SSH tunnel to prevent attacks that leverage SSH.
INTRUSION PREVENTION	
Feature	Description
Countermeasure-based protection	Tightly integrated intrusion prevention system (IPS) leverages signatures and other countermeasures to scan packet payloads for vulnerabilities and exploits, covering a broad spectrum of attacks and vulnerabilities.
Automatic signature updates	The SonicWall Threat Research Team continuously researches and deploys updates to an extensive list of IPS countermeasures that covers more than 50 attack categories. The new updates take immediate effect without any reboot or service interruption required.
Intra-zone IPS protection	Bolsters internal security by segmenting the network into multiple security zones with intrusion prevention, preventing threats from propagating across the zone boundaries.



INTRUSION PREVENTION CON'T	Description
Feature	Description
Botnet command and control (CnC) detection and blocking	Identifies and blocks command and control traffic originating from bots on the local network to IPs and domains that are identified as propagating malware or are known CnC points.
Protocol abuse/anomaly	Identifies and blocks attacks that abuse protocols in an attempt to sneak past the IPS.
Zero-day protection	Protects the network against zero-day attacks with constant updates against the latest exploit methods and techniques that cover thousands of individual exploits.
Anti-evasion technology	Extensive stream normalization, decoding and other techniques ensure that threats do not enter the network undetected by utilizing evasion techniques in Layers 2-7.
THREAT PREVENTION	
Feature	Description
Gateway anti-malware	The RFDPI engine scans all inbound, outbound and intra-zone traffic for viruses, Trojans, key loggers and other malware in files of unlimited length and size across all ports and TCP streams.
Capture Cloud malware protection	A continuously updated database of tens of millions of threat signatures resides in the SonicWall cloud servers and is referenced to augment the capabilities of the onboard signature database, providing RFDPI with extensive coverage of threats.
Around-the-clock security updates	New threat updates are automatically pushed to firewalls in the field with active security services, and take effect immediately without reboots or interruptions.
Bi-directional raw TCP inspection	The RFDPI engine is capable of scanning raw TCP streams on any port bi-directionally preventing attacks that they to sneak by outdated security systems that focus on securing a few well-known ports.
Extensive protocol support	Identifies common protocols such as HTTP/S, FTP, SMTP, SMBv1/v2 and others, which do not send data in raw TCP, and decodes payloads for malware inspection, even if they do not run on standard, well-known ports.
APPLICATION INTELLIGENCE AND CO	ONTROL
Feature	Description
Application control	Control applications, or individual application features, that are identified by the RFDPI engine against a continuously expanding database of over thousands of application signatures, to increase network security and enhance network productivity.
Custom application identification	Control custom applications by creating signatures based on specific parameters or patterns unique to an application in its network communications, in order to gain further control over the network.
Application bandwidth management	Granularly allocate and regulate available bandwidth for critical applications or application categories while inhibiting nonessential application traffic.
Granular control	Control applications, or specific components of an application, based on schedules, user groups, exclusion lists and a range of actions with full SSO user identification through LDAP/AD/Terminal Services/Citrix integration.
CONTENT FILTERING	
Feature	Description
Inside/outside content filtering	Enforce acceptable use policies and block access to HTTP/HTTPS websites containing information or images that are objectionable or unproductive with Content Filtering Service and Content Filtering Client.
Enforced Content Filtering Client	Extend policy enforcement to block internet content for Windows, Mac OS, Android and Chrome devices located outside the firewall perimeter.
Granular controls	Block content using the predefined categories or any combination of categories. Filtering can be scheduled by time of day, such as during school or business hours, and applied to individual users or groups.
Web caching	URL ratings are cached locally on the SonicWall firewall so that the response time for subsequent access to frequently visited sites is only a fraction of a second.
ENFORCED ANTI-VIRUS AND ANTI-S	PYWARE
Feature	Description
Multi-layered protection	Utilize the firewall capabilities (optional) as the first layer of defense at the perimeter, coupled with endpoir protection to block, viruses entering network through laptops, thumb drives and other unprotected system
Automated enforcement option	Ensure every computer accessing the network has the appropriate antivirus software and/or DPI- SSL certificate installed and active, eliminating the costs commonly associated with desktop antivirus management.
Automated deployment and installation option	Machine-by-machine deployment and installation of antivirus and anti-spyware clients is automatic across the network, minimizing administrative overhead.
Next-generation antivirus	Capture Client uses a static artificial intelligence (AI) engine to determine threats before they can execute and roll back to a previous uninfected state.
Spyware protection	Powerful spyware protection scans and blocks the installation of a comprehensive array of spyware program on desktops and laptops before they transmit confidential data, providing greater desktop security and performance.



#### SonicOS feature summary

#### Firewall

- Stateful packet inspection
- Reassembly-Free Deep Packet Inspection
- DDoS attack protection (UDP/ICMP/SYN flood)
- IPv4/IPv6 support
- Biometric authentication for remote access
- DNS proxy
- REST APIs

#### SSL/SSH decryption and inspection<sup>1</sup>

- Deep packet inspection for TLS/SSL/SSH
- Inclusion/exclusion of objects, groups or hostnames
- TLS/SSL control
- Granular DPI SSL controls per zone or rule

#### Capture Advanced Threat Protection<sup>1</sup>

- Real-Time Deep Memory Inspection
- Cloud-based multi-engine analysis
- Virtualized sandboxing
- Hypervisor level analysis
- Full system emulation
- Broad file type examination
- Automated and manual submission
- Real-time threat intelligence updates
- Block until verdict
- Capture Client

#### Intrusion prevention<sup>1</sup>

- Signature-based scanning
- Automatic signature updates
- Bidirectional inspection
- Granular IPS rule capability
- GeoIP/Botnet filtering<sup>2</sup>
- Regular expression matching

#### Anti-malware<sup>1</sup>

• Stream-based malware scanning

<sup>2</sup> State sync high availability only on SonicWall TZ500 and SonicWall TZ600 models

- Gateway anti-virus
- Gateway anti-spyware
- Bi-directional inspection
- No file size limitation

<sup>1</sup> Requires added subscription

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• Cloud malware database

#### Application identification<sup>1</sup>

- Application control
- Application bandwidth management
- Custom application signature creation
- Data leakage prevention
- Application reporting over NetFlow/IPFIX
- Comprehensive application signature database

#### Traffic visualization and analytics

- User activity
- Application/bandwidth/threat usage
- Cloud-based analytics

#### HTTP/HTTPS Web content filtering<sup>1</sup>

- URL filtering
- Anti-proxy technology
- Keyword blocking
- Policy-based filtering (exclusion/ inclusion)
- HTTP header insertion
- Bandwidth manage CFS rating categories
- Unified policy model with app control
- Content Filtering Client

#### VPN

- Auto-provision VPN
- IPSec VPN for site-to-site connectivity
- SSL VPN and IPSec client remote access
- Redundant VPN gateway
- Mobile Connect for iOS, Mac OS X, Windows, Chrome, Android and Kindle Fire
- Route-based VPN (OSPF, RIP, BGP)

#### Networking

- Secure SD-WAN
- PortShield
- Enhanced logging
- Layer-2 QoS
- Port security
- Dynamic routing (RIP/OSPF/BGP)

SONICWALL

- SonicWall wireless controller
- Policy-based routing (ToS/metric and ECMP)
- Asymmetric routing
- DHCP server

- NAT
- Bandwidth management
- High availability Active/Standby with state sync<sup>2</sup>
- Inbound/outbound load balancing
- L2 bridge mode, NAT mode
- 3G/4G WAN failover
- Common Access Card (CAC) support

#### VoIP

- Granular QoS control
- Bandwidth management
- DPI for VoIP traffic
- H.323 gatekeeper and SIP proxy support

#### Management and monitoring

- Web GUI
- Command line interface (CLI)
- SNMPv2/v3
- Centralized management and reporting with SonicWall GMS and Capture Security Center
- Logging

Integrated Wireless

• WIDS/WIPS

• Captive portal

Cloud ACL

• Wireless guest services

- Netflow/IPFix exporting
- Cloud-based configuration backup
- Application and bandwidth visualization
- IPv4 and IPv6 management
- Dell N-Series and X-Series switch management including cascaded switches<sup>2</sup>

• Dual-band (2.4 GHz and 5.0 GHz)

• Lightweight hotspot messaging

Virtual access point segmentation

• 802.11 a/b/g/n/ac wireless standards<sup>2</sup>

FIREWALL GENERAL	SOHO SERIES	SOHO 250 SERIES	TZ300 SERIES	TZ350 SERIES
Operating system	SonicOS			
Interfaces	5x1GbE, 1 l	JSB, 1 Console	5x1GbE, 1 USB, 1 Console	5x1GbE, 1 USB, 1 Console
Power over Ethernet (PoE) support				—
Expansion		USI	В	
Management	CLI, SS	SH, Web UI, Capture Secu	urity Center, GMS, RE	ST APIs
Single Sign-On (SSO) Users	250	350	500	500
VLAN interfaces		25		
Access points supported (maximum)	2	4	8	8
FIREWALL/VPN PERFORMANCE	SOHO SERIES	SOHO 250 SERIES	TZ300 SERIES	TZ350 SERIES
Firewall inspection throughput <sup>1</sup>	300 Mbps	600 Mbps	750 Mbps	1.0 Gbps
Threat Prevention throughput <sup>2</sup>	150 Mbps	200 Mbps	235 Mbps	335 Mbps
Application inspection throughput <sup>2</sup>		275 Mbps	375 Mbps	600 Mbps
IPS throughput <sup>2</sup>	200 Mbps	250 Mbps	300 Mbps	400 Mbps
Anti-malware inspection throughput <sup>2</sup>	150 Mbps	200 Mbps	235 Mbps	335 Mbps
TLS/SSL inspection and decryption throughput (DPI SSL) <sup>2</sup>	30 Mbps	50 Mbps	60 Mbps	65 Mbps
IPSec VPN throughput <sup>3</sup>	150 Mbps	200 Mbps	300 Mbps	430 Mbps
Connections per second	1,800	3,000	5,000	6,000
Maximum connections (SPI)	10,000	50,000	100,000	100,000
Maximum connections (DPI)	10,000	50,000	90,000	90,000
Maximum connections (DPI SSL)	250	25,000	25,000	25,000
VPN	SOHO SERIES	SOHO 250 SERIES	TZ300 SERIES	TZ350 SERIES
Site-to-site VPN tunnels	10	10	10	15
IPSec VPN clients (maximum)	1 (5)	1 (5)	1 (10)	1 (10)
SSL VPN licenses (maximum)	1 (10)	1 (25)	1 (50)	1 (75)
Virtual assist bundled (maximum)	_	1 (30-day trial)	1 (30-day trial)	1 (30-day trial)
Encryption/authentication	DES, 3DES, A	AES (128, 192, 256-bit),	MD5, SHA-1, Suite B	Cryptography
Key exchange		Diffie Hellman Gro	oups 1, 2, 5, 14v	
Route-based VPN		RIP, OSP	F, BGP	
Certificate support	Verisign, Thawte, (	Cybertrust, RSA Keon, Er SonicWall V		A for SonicWall-to-
VPN features	Dead F	Peer Detection, DHCP Ov Redundant VPN Gatew	1 -	,
Global VPN client platforms supported		soft® Windows Vista 32/6 ws 8.0 32/64-bit, Windov	, ,	
NetExtender		Vista 32/64-bit, Window bit, Mac OS X 10.4+, Linu		
Mobile Connect		iOS, Mac OS X, Google® Windows 8.1	(Embedded)	Chrome,
SECURITY SERVICES	SOHO SERIES	SOHO 250 SERIES	TZ300 SERIES	TZ350 SERIES
Deep Packet Inspection services	Gateway	Anti-Virus, Anti-Spywar	e, Intrusion Preventior	n, DPI SSL
Content Filtering Service (CFS)		IP, keyword and content such as ActiveX, Java, C		•
Comprehensive Anti-Spam Service		Suppo	rted	
Application Visualization	No	Yes	Yes	Yes
Application Control	Yes	Yes	Yes	Yes
Capture Advanced Threat Protection	No	Yes	Yes	Yes
NETWORKING	SOHO SERIES	SOHO 250 SERIES	TZ300 SERIES	TZ350 SERIES
IP address assignment	Static, (DHCP, Pl	PPoE, L2TP and PPTP cli	ent), Internal DHCP s	erver, DHCP relay
NAT modes	1:1, 1:many, many:1	, many:many, flexible NA	T (overlapping IPs), P	AT, transparent mod
Routing protocols <sup>4</sup>		, OSPF, RIPv1/v2, static i		
QoS	Bandwidth priority, max bandwidth, guaranteed bandwidth, DSCP marking, 802.1e (WMM)			



NETWORKING CONT'D	SOHO SERIES	SOHO 250 SERIES	TZ300 SERIES	TZ350 SERIES
Authentication		ins), XAUTH/RADIUS, mal user database	LDAP (multiple do RADIUS, SSO, No database, Termina Common Acces	vell, internal user I Services, Citrix,
Local user database		15	50	
VoIP		Full H.323	v1-5, SIP	
Standards		PPTP, RADIU		
Certifications	FIPS 140-2 (with	Firewall, ICS		2), ICSA Network
Certifications pending		Common Criteria NDI		
Common Access Card (CAC)		Supp		
High availability		10	Active/s	,
HARDWARE	SOHO SERIES	SOHO 250 SERIES	TZ300 SERIES	TZ350 SERIES
Form factor		Desk	ktop	
Power supply	24W e	external	24W external 65W external (TZ300P only)	24W external
Maximum power consumption (W)	6.4 / 11.3	6.9 / 11.3	6.9 / 12.0	6.9 / 12.0
Input power		100 to 240 VAC	, 50-60 Hz, 1 A	
Total heat dissipation	21.8 / 38.7 BTU	23.5 / 38.7 BTU	23.5 / 40.9 BTU	23.5 / 40.9 BTL
Dimensions		1 x 19 cm 5 x 7.48 in	3.5 x 13.4 x 19 cm 1.38 x 5.28 x 7.48 in	3.5 x 13.4 x 19 ci 1.38 x 5.28 x 7.4 in
Weight		/ 0.75 lbs / 1.06 lbs	0.73 kg / 1.61 lbs 0.84 kg / 1.85 lbs	0.73 kg / 1.61 lb 0.84 kg / 1.85 lb
WEEE weight	0	/ 1.76 lbs / 2.07 lbs	1.15 kg / 2.53 lbs 1.26 kg / 2.78 lbs	1.15 kg / 2.53 lb 1.26 kg / 2.78 lb
Shipping weight	0	/ 2.64 lbs / 2.95 lbs	1.37 kg / 3.02 lbs 1.48 kg / 3.26 lbs	1.37 kg / 3.02 lb 1.48 kg / 3.26 lb
MTBF (in years)	58.9/56.1 (wireless)	56.1	56.1	56.1
Environment (Operating/Storage)	32	°-105° F (0°-40° C)/-40°	° to 158° F (-40° to 70°	C)
Humidity		5-95% non-	5	
REGULATORY	SOHO SERIES	SOHO 250 SERIES	TZ300 SERIES	TZ350 SERIES
Major regulatory compliance (wired models)	RoHS), C-Tick, VC TUV/GS, CB, Mexic	lass B, CE (EMC, LVD, CI Class B, UL, cUL, o CoC by UL, WEEE, KCC/MSIP	FCC Class B, ICES Cla RoHS), C-Tick, VCC TUV/GS, CB, Mexico REACH, K	I Class B, UL, cUL, CoC by UL, WEEE
Major regulatory compliance (wireless models)	CE (RED, RoHS), RC TELEC, UL, cUL, TUV by UL, WE	F ICES Class B, IC RF M, VCCI Class B, MIC/ //GS, CB, Mexico CoC EE, REACH	FCC Class B, FCC F RF CE (RED, RoHS), MIC/TELEC, UL, cUL, CoC by UL, W	RCM, VCCI Class E TUV/GS, CB, Mexi
INTEGRATED WIRELESS	SOHO SERIES	SOHO 250 SERIES	TZ300 SERIES	TZ350 SERIES
Standards	802.11	a/b/g/n	802.11a/b/g/n/ac (V 802.11i, TKIP, PSK, EAP-T	02.1x, EAP-PEAP,
Frequency bands⁵	2.412-2.472 GHz; 8	325 GHz; 802.11b/g: 02.11n: 2.412-2.472 -5.825 GHz	802.11a: 5.180-5.82 2.412-2.472 GHz; 80 GHz, 5.180-5.825 GH 2.472 GHz, 5.1	25 GHz; 802.11b/g )2.11n: 2.412-2.47 Iz; 802.11ac: 2.41



INTEGRATED WIRELESS Operating Channels	SOHO SERIES         SOHO 250 SERIES           802.11a: US and Canada 12, Europe 11,           Japan 4, Singapore 4, Taiwan 4; 802.11b/g:           US and Canada 1-11, Europe 1-13, Japan           1-14 (14-802.11b only); 802.11n (2.4           GHz): US and Canada 1-11, Europe 1-13,           Japan 1-13; 802.11n (5 GHz): US and           Canada 36-48/149-165, Europe 36-48,           Japan 36-48, Spain 36-48/52-64;	TZ300 SERIES         TZ350 SERIES           802.11a: US and Canada 12, Europe         11, Japan 4, Singapore 4, Taiwan 4;           802.11b/g: US and Canada 1-11, Europe         1-13, Japan 1-14 (14-802.11b only);           802.11n (2.4 GHz): US and Canada 1-11, Europe 1-13, Japan 1-13; 802.11n (5         GHz): US and Canada 36-48/149-165, Europe 36-48, Japan 36-48, Spain 36-48/52-64; 802.11ac: US and Canada 36-48/149-165, Europe 36-48, Japan 36-48, Spain 36-48/52-64
Transmit output power	Based on the regulatory domain sp	ecified by the system administrator
Transmit power control	Supp	orted
Data rates supported	802.11a: 6, 9, 12, 18, 24, 36, 48, 54 Mbps per channel; 802.11b: 1, 2, 5.5, 11 Mbps per channel; 802.11g: 6, 9, 12, 18, 24, 36, 48, 54 Mbps per channel; 802.11n: 7.2, 14.4, 21.7, 28.9, 43.3, 57.8, 65, 72.2, 15, 30, 45, 60, 90, 120, 135, 150 Mbps per channel	802.11a: 6, 9, 12, 18, 24, 36, 48, 54 Mbps per channel; 802.11b: 1, 2, 5.5, 11 Mbps per channel; 802.11g: 6, 9, 12, 18, 24, 36, 48, 54 Mbps per channel; 802.11n: 7.2, 14.4, 21.7, 28.9, 43.3, 57.8, 65, 72.2, 15, 30, 45, 60, 90, 120, 135, 150 Mbps per channel; 802.11ac: 7.2, 14.4, 21.7, 28.9, 43.3, 57.8, 65, 72.2, 86.7, 96.3, 15, 30, 45, 60, 90, 120, 135, 150, 180, 200, 32.5, 65, 97.5, 130, 195, 260, 292.5, 325, 390, 433.3, 65, 130, 195, 260, 390, 520, 585, 650, 780, 866.7 Mbps per channel
Modulation technology spectrum	802.11a: Orthogonal Frequency Division Multiplexing (OFDM); 802.11b: Direct Sequence Spread Spectrum (DSSS); 802.11g: Orthogonal Frequency Division Multiplexing (OFDM)/Direct Sequence Spread Spectrum (DSSS); 802.11n: Orthogonal Frequency Division Multiplexing (OFDM)	802.11a: Orthogonal Frequency Division Multiplexing (OFDM); 802.11b: Direct Sequence Spread Spectrum (DSSS); 802.11g: Orthogonal Frequency Division Multiplexing (OFDM)/Direct Sequence Spread Spectrum (DSSS); 802.11n: Orthogonal Frequency Division Multiplexing (OFDM); 802.11ac: Orthogonal Frequency Division Multiplexing (OFDM)

\*Future use.

<sup>1</sup>Testing Methodologies: Maximum performance based on RFC 2544 (for firewall). Actual performance may vary depending on network conditions and activated services. <sup>2</sup>Threat Prevention/GatewayAV/Anti-Spyware/IPS throughput measured using industry standard Spirent WebAvalanche HTTP performance test and Ixia test tools. Testing done with multiple flows through multiple port pairs. Threat Prevention throughput measured with Gateway AV, Anti-Spyware, IPS and Application Control enabled.

done with multiple flows through multiple port pairs. Threat Prevention throughput measured with Gateway AV, Anti-Spyware, IPS and Application Control enabled. <sup>3</sup>VPN throughput measured using UDP traffic at 1280 byte packet size adhering to RFC 2544. All specifications, features and availability are subject to change. <sup>4</sup>BGP is available only on SonicWall TZ400, TZ500 and TZ600.

<sup>5</sup>All TZ integrated wireless models can support either 2.4GHz or 5GHz band. For dual-band support, please use SonicWall's wireless access point products



FIREWALL GENERAL	TZ400 SERIES	TZ500 SERIES	TZ600 SERIES
Operating system		SonicOS	
	7x1GbE, 1 USB,	8x1GbE, 2 USB,	10x1GbE, 2 USB,
Interfaces	1 Console	1 Console	1 Console, 1 Expansion Slot
Power over Ethernet (PoE) support	_	—	TZ600P - 4 ports (4 PoE or 4 PoE+)
Expansion	USB	2 USB	Expansion Slot (Rear)*, 2 USE
Management	CLI, SSH, We	b UI, Capture Security Center, G	MS, REST APIs
Single Sign-On (SSO) Users	500	500	500
VLAN interfaces	50	50	50
Access points supported (maximum)	16	16	24
FIREWALL/VPN PERFORMANCE	TZ400 SERIES	TZ500 SERIES	TZ600 SERIES
Firewall inspection throughput <sup>1</sup>	1.3 Gbps	1.4 Gbps	1.9 Gbps
Threat Prevention throughput <sup>2</sup>	600 Mbps	700 Mbps	800 Mbps
Application inspection throughput <sup>2</sup>	1.2 Gbps	1.3 Gbps	1.8 Gbps
IPS throughput <sup>2</sup>	900 Mbps	1.0 Gbps	1.2 Gbps
Anti-malware inspection throughput <sup>2</sup>	600 Mbps	700 Mbps	800 Mbps
TLS/SSL inspection and decryption throughput (DPI SSL) <sup>2</sup>	180 Mbps	225 Mbps	300 Mbps
IPSec VPN throughput <sup>3</sup>	900 Mbps	1.0 Gbps	1.1 Gbps
Connections per second	6,000	8,000	12,000
Maximum connections (SPI)	150,000	150,000	150,000
Maximum connections (DPI)	125,000	125,000	125,000
Maximum connections (DPI SSL)	25,000	25,000	25,000
VPN	TZ400 SERIES	TZ500 SERIES	TZ600 SERIES
Site-to-site VPN tunnels	20	25	50
IPSec VPN clients (maximum)	2 (25)	2 (25)	2 (25)
SSL VPN licenses (maximum)	2 (100)	2 (150)	2 (200)
Virtual assist bundled (maximum)	1 (30-day trial)	1 (30-day trial)	1 (30-day trial)
Encryption/authentication		28, 192, 256-bit)/MD5, SHA-1, 9	Suite B Cryptography
Key exchange		Diffie Hellman Groups 1, 2, 5, 14	,, ,, ,
Route-based VPN		RIP, OSPF, BGP	
Certificate support	_	Cybertrust, RSA Keon, Entrust a onicWall-to- SonicWall VPN, SC	
VPN features		etection, DHCP Over VPN, IPSec ndant VPN Gateway, Route-base	
Global VPN client platforms supported		indows Vista 32/64-bit, Windov 32/64-bit, Windows 8.1 32/64-b	
NetExtender		bit, Windows 7, Windows 8.0 3 ( 10.4+, Linux FC3+/Ubuntu 7+/	32/64-bit, Windows 8.1 32/64-bi OpenSUSE
Mobile Connect	Apple® iOS, Mac OS X, Goog	le® Android™, Kindle Fire, Chro	me, Windows 8.1 (Embedded)
SECURITY SERVICES	TZ400 SERIES	TZ500 SERIES	TZ600 SERIES
Deep Packet Inspection services	Gateway Anti-V	irus, Anti-Spyware, Intrusion Pr	evention, DPI SSL
Content Filtering Service (CFS)		and content scanning, Compreh veX, Java, Cookies for privacy, all	ensive filtering based on file type ow/forbid lists
Comprehensive Anti-Spam Service		Supported	
Application Visualization	Yes	Yes	Yes
Application Control	Yes	Yes	Yes
Capture Advanced Threat Protection	Yes	Yes	Yes
NETWORKING	TZ400 SERIES	TZ500 SERIES	TZ600 SERIES
IP address assignment		.2TP and PPTP client), Internal [	DHCP server, DHCP relay
NAT modes	1:1, 1:many, many:1, many	many, flexible NAT (overlapping:	IPs), PAT, transparent mode
Routing protocols⁴	BGP⁴, OSPF	, RIPv1/v2, static routes, policy-	based routing
QoS	Bandwidth priority may ban	lwidth, guaranteed bandwidth, I	DSCP marking 802 1 (M/MM)



NETWORKING	TZ400 SERIES	TZ500 SERIES	TZ600 SERIES
Authentication		ns), XAUTH/RADIUS, SSO, Novell, Services, Citrix, Common Access C	
Local user database	150 250		
VoIP		Full H.323v1-5, SIP	
Standards	TCP/IP, UDP, ICMP, HTTP, HTTP	S, IPSec, ISAKMP/IKE, SNMP, DHO IEEE 802.3	CP, PPPoE, L2TP, PPTP, RADIUS,
Certifications	FIPS 140-2 (with Suite B) Leve	el 2, UC APL, VPNC, IPv6 (Phase 2 Anti-virus	2), ICSA Network Firewall, ICSA
Certifications pending	Con	nmon Criteria NDPP (Firewall and	IPS)
Common Access Card (CAC)		Supported	
High availability	Active/standby	Active/Standby with s	tateful synchronization
HARDWARE	TZ400 SERIES	TZ500 SERIES	TZ600 SERIES
Form factor		Desktop	
Power supply	24W external	36W external	60W external 180W external (TZ600P only)
Maximum power consumption (W)	9.2 / 13.8	13.4 / 17.7	16.1
Input power		100-240 VAC, 50-60 Hz, 1 A	
Total heat dissipation	31.3 / 47.1 BTU	45.9 / 60.5 BTU	55.1 BTU
Dimensions	3.5 x 13.4 x 19 cm 1.38 x 5.28 x 7.48 in	3.5 x 15 x 22.5 cm 1.38 x 5.91 x 8.86 in	3.5 x 18 x 28 cm 1.38 x 7.09 x 11.02 in
Weight	0.73 kg / 1.61 lbs 0.84 kg / 1.85 lbs	0.92 kg / 2.03 lbs 1.05 kg / 2.31 lbs	1.47 kg / 3.24 lbs
WEEE weight	1.15 kg / 2.53 lbs 1.26 kg / 2.78 lbs	1.34 kg / 2.95 lbs 1.48 kg / 3.26 lbs	1.89 kg /4.16 lbs
Shipping weight	1.37 kg / 3.02 lbs 1.48 kg / 3.26 lbs	1.93 kg / 4.25 lbs 2.07 kg / 4.56 lbs	2.48 kg / 5.47 lbs
MTBF (in years)	54.0	40.8	18.4
Environment (Operating/Storage)	32°-105	° F (0°-40° C)/-40° to 158° F (-40°	to 70° C)
Humidity		5-95% non-condensing	
REGULATORY	TZ400 SERIES	TZ500 SERIES	TZ600 SERIES
Major regulatory compliance (wired models)	FCC Class B, ICES Class B, CE (EMC, LVD, RoHS), C-Tick, VCCI Class B, UL, cUL, TUV/ GS, CB, Mexico CoC by UL, WEEE, REACH, KCC/MSIP	FCC Class B, ICES Class B, CE (EMC, LVD, RoHS), C-Tick, VCCI Class B, UL, cUL, TUV/ GS, CB, Mexico CoC by UL, WEEE, REACH, BSMI, KCC/ MSIP	FCC Class A, ICES Class A, CE (EMC, LVD, RoHS), C-Tick, VCCI Class A, UL cUL, TUV/GS, CB, Mexico CoC by UL, WEEE, REACH, KCC/MSIP
Major regulatory compliance (wireless models)	FCC Class B, FCC RF ICES Class B, IC RF CE (RED, RoHS), RCM, VCCI Class B, MIC/ TELEC, UL, cUL, TUV/GS, CB, Mexico CoC by UL, WEEE, REACH	FCC Class B, FCC RF ICES Class B, IC RF CE (RED, RoHS), RCM, VCCI Class B, MIC/ TELEC, UL, cUL, TUV/GS, CB, Mexico CoC by UL, WEEE, REACH	



INTEGRATED WIRELESS	TZ400 SERIES	TZ500 SERIES	TZ600 SERIES
Standards	802.11a/b/g/n/ac (WEP, WPA, WPA2, EAP-PEAP, EAP-		—
Frequency bands⁵	802.11n: 2.412-2.472 GHz, 5.180-5.8	802.11a: 5.180-5.825 GHz; 802.11b/g: 2.412-2.472 GHz; 802.11n: 2.412-2.472 GHz, 5.180-5.825 GHz; 802.11ac: 2.412- 2.472 GHz, 5.180-5.825 GHz	
Operating Channels	802.11a: US and Canada 12, Europe 4, Taiwan 4; 802.11b/g: US and Can Japan 1-14 (14-802.11b only); 802 Canada 1-11, Europe 1-13, Japan 1- and Canada 36-48/149-165, Europe 3 36-48/52-64; 802.11ac: US and Canad 36-48, Japan 36-48, Spain	nada 1-11, Europe 1-13, 11n (2.4 GHz): US and 13; 802.11n (5 GHz): US 36-48, Japan 36-48, Spain da 36-48/149-165, Europe	
Transmit output power	Based on the regulatory domain sp administrator		—
Transmit power control	Supported		—
Data rates supported	802.11a: 6, 9, 12, 18, 24, 36, 48, 54 M 1, 2, 5.5, 11 Mbps per channel; 802.11 54 Mbps per channel; 802.11n: 7.2, 14 65, 72.2, 15, 30, 45, 60, 90, 120, 135 802.11ac: 7.2, 14.4, 21.7, 28.9, 43.3, 15, 30, 45, 60, 90, 120, 135, 150, 180 195, 260, 292.5, 325, 390, 433.3, 65, 585, 650, 780, 866.7 Mbp	Lg: 6, 9, 12, 18, 24, 36, 48, 4.4, 21.7, 28.9, 43.3, 57.8, 5, 150 Mbps per channel; 57.8, 65, 72.2, 86.7, 96.3, 0, 200, 32.5, 65, 97.5, 130, 130, 195, 260, 390, 520,	
Modulation technology spectrum	802.11a: Orthogonal Frequency Divis 802.11b: Direct Sequence Spread Spr Orthogonal Frequency Division Mult Sequence Spread Spectrum (DSSS) Frequency Division Multiplexing (OFDI Frequency Division Multiple	ectrum (DSSS); 802.11g: tiplexing (OFDM)/Direct ); 802.11n: Orthogonal M); 802.11ac: Orthogonal	_



SonicWall TZ Series ordering information

Product	SKU
SOHO 250 with 1-year TotalSecure Advanced Edition	02-SSC-1815
SOHO 250 Wireless-AC with 1-year TotalSecure Advanced Edition	02-SSC-1824
TZ300 with 1-year TotalSecure Advanced Edition	01-SSC-1702
TZ300 Wireless-AC with 1-year TotalSecure Advanced Edition	01-SSC-1703
TZ300P with 1-year TotalSecure Advanced Edition	02-SSC-0602
TZ350 with 1-year TotalSecure Advanced Edition	02-SSC-1843
TZ350 Wireless-AC with 1-year TotalSecure Advanced Edition	02-SSC-1851
TZ400 with 1-year TotalSecure Advanced Edition	01-SSC-1705
TZ400 Wireless-AC with 1-year TotalSecure Advanced Edition	01-SSC-1706
TZ500 with 1-year TotalSecure Advanced Edition	01-SSC-1708
TZ500 Wireless-AC with 1-year TotalSecure Advanced Edition	01-SSC-1709
TZ600 with 1-year TotalSecure Advanced Edition	01-SSC-1711
TZ600P with 1-year TotalSecure Advanced Edition	02-SSC-0600
High availability options (each unit must be the same model)	
TZ500 High Availability	01-SSC-0439
TZ600 High Availability	01-SSC-0220

Services	SKU
For SonicWall SOHO 250 Series	
Advanced Gateway Security Suite - Capture ATP, Threat Prevention, and 24x7 Support (1-year)	02-SSC-1726
Capture Advanced Threat Protection for SOHO 250 (1-year)	02-SSC-1732
Gateway Anti-Virus, Intrusion Prevention and Application Control (1-year)	02-SSC-1750
Content Filtering Service (1-year)	02-SSC-1744
Comprehensive Anti-Spam Service (1-year)	02-SSC-1823
24x7 Support (1-year)	02-SSC-1720
For SonicWall TZ300 Series	
Advanced Gateway Security Suite - Capture ATP, Threat Prevention, and 24x7 Support (1-year)	01-SSC-1430
Capture Advanced Threat Protection for TZ300 (1-year)	01-SSC-1435
Gateway Anti-Virus, Intrusion Prevention and Application Control (1-year)	01-SSC-0602
Content Filtering Service (1-year)	01-SSC-0608
Comprehensive Anti-Spam Service (1-year)	01-SSC-0632
24x7 Support (1-year)	01-SSC-0620
For SonicWall TZ350 Series	
Advanced Gateway Security Suite - Capture ATP, Threat Prevention, and 24x7 Support (1-year)	02-SSC-1773
Capture Advanced Threat Protection for TZ350 (1-year)	02-SSC-1779
Gateway Anti-Virus, Intrusion Prevention and Application Control (1-year)	02-SSC-1797
Content Filtering Service (1-year)	02-SSC-1791
Comprehensive Anti-Spam Service (1-year)	02-SSC-1809
24x7 Support (1-year)	02-SSC-1767



SonicWall TZ Series ordering information

For SonicWall TZ400 Series	
Advanced Gateway Security Suite - Capture ATP, Threat Prevention, and 24x7 Support (1-year)	01-SSC-1440
Capture Advanced Threat Protection for TZ400 (1-year)	01-SSC-1445
Gateway Anti-Virus, Intrusion Prevention and Application Control (1-year)	01-SSC-0534
Content Filtering Service (1-year)	01-SSC-0540
Comprehensive Anti-Spam Service (1-year)	01-SSC-0561
24x7 Support (1-year)	01-SSC-0552
For SonicWall TZ500 Series	
Advanced Gateway Security Suite - Capture ATP, Threat Prevention, and 24x7 Support (1-year)	01-SSC-1450
Capture Advanced Threat Protection for TZ500 (1-year)	01-SSC-1455
Gateway Anti-Virus, Intrusion Prevention and Application Control (1-year)	01-SSC-0458
Content Filtering Service (1-year)	01-SSC-0464
Comprehensive Anti-Spam Service (1-year)	01-SSC-0482
24x7 Support (1-year)	01-SSC-0476
For SonicWall TZ600 Series	
Advanced Gateway Security Suite - Capture ATP, Threat Prevention, and 24x7 Support (1-year)	01-SSC-1460
Capture Advanced Threat Protection for TZ600 (1-year)	01-SSC-1465
Gateway Anti-Virus, Intrusion Prevention and Application Control (1-year)	01-SSC-0228
Content Filtering Service (1-year)	01-SSC-0234
Comprehensive Anti-Spam Service (1-year)	01-SSC-0252
24x7 Support (1-year)	01-SSC-0246

#### Regulatory model numbers

SOHO/SOHO Wireless	APL31-0B9/APL41-0BA
SOHO 250/SOHO 250 Wireless	APL41-0D6/APL41-0BA
TZ300/TZ300 Wireless/ TZ300P	APL28-0B4/APL28-0B5/ APL47-0D2
TZ350/TZ350 Wireless	APL28-0B4/APL28-0B5
TZ400/TZ400 Wireless	APL28-0B4/APL28-0B5
TZ500/TZ500 Wireless	APL29-0B6/APL29-0B7
TZ600/TZ600P	APL30-0B8/APL48-0D3

#### About SonicWall

SonicWall has been fighting the cybercriminal industry for over 28 years defending small and medium businesses, enterprises and government agencies worldwide. Backed by research from SonicWall Capture Labs, our award- winning, real-time breach detection and prevention solutions secure more than a million networks, and their emails, applications and data, in over 215 countries and territories. These organizations run more effectively and fear less about security. For more information, visit www.sonicwall.com or follow us on Twitter, LinkedIn, Facebook and Instagram.

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### Have a Question? We Can Help! Call Toll-Free 866.745.0102

SonicWall TZ Menu	Home / Products / Firewalls / SonicWall Firewall / SonicWall TZ / SonicWall TZ Series         SonicWall TZ Series Firewall Comparison         TZ Firewalls       SOHO Firewalls			
SonicWall Products SonicWall Home				
Compare New TZ Series				
SonicWall SOHO				
SonicWall SOHO 250	Models:	TZ300	TZ350	TZ400
SonicWall TZ300		111	1.1.1	11
SonicWall TZ300 PoE				
SonicWall TZ350		and the second		· · ·
SonicWall TZ400	SonicOS Version	SonicOS		
SonicWall TZ500	Security Processor	2 x 800 MHz	-	4 x 800 MHz
SonicWall TZ600		5x1GbE, 1 USB, 1	5x1GbE, 1 USB, 1	7x1GbE, 1 US
SonicWall TZ600 PoE	Interfaces	Console	Console	Console
	Memory (RAM)	1 GB	-	1 GB
Old TZ Products	Memory (flash)	64 MB	-	64 MB
Compare TZ Firewall	Expansion	USB	USB	USB
SonicWall TZ 105	Expansion	030	036	030
SonicWall TZ 205	Single Sign-On (SSO) Users	500	500	500
SonicWall TZ 215	VLAN Interfaces	25	25	50
Services & Licenses Buy or Renew Subscriptions	SonicPoints supported (maximum)	8	8	16
Firewall Configuration Service	Dell X-Series switch models supported	X1008/P, X1018/P, X1026/P, X1052/P, X4012		
Managed Firewall Service				
Online Video Training		<b>TZ300</b>	TZ350	TZ400
Live Technical Support	Firewall Inspection	750 Mbps	1,000 Mbps	1,300 Mbps
SonicWall Upgrade Program	Throughput <sup>1</sup>	edata oc		1,500 10005
	Threat Prevention Throughput <sup>2</sup>	235 Mbps	335 Mbps	600 Mbps
0★★★★★ inhuma classificação disponivel	Application Inspection Throughput <sup>2</sup>	375 Mbps	600 Mbps	1200 Mbps

https://www.firewalls.com/products/firewalls/sonicwall/sonicwall-tz/tz-comparison

SonicWall TZ Series Comparison | TZ300, TZ350, TZ400, TZ500, TZ600, SOHO, and SOHO 250 - Firewalls.com

IPS Throughput <sup>2</sup>	300 Mbps	400 Mbps	900 Mbps	
Anti-malware Throughput <sup>2</sup>	235 Mbps	300 Mbps	600 Mbps	
IMIX Throughput	200 Mbps	-	500 Mbps	
SSL Inspection & Decryption (DPI SSL) Throughput <sup>2</sup>	60 Mbps	65 Mbps	180 Mbps	
IPSec VPN Throughput <sup>3</sup>	300 Mbps	430 Mbps	900 Mbps	
Connections per second	5,000	6,000	6,000	
Maximum connections (SPI)	100,000	100,000	150,000	
Maximum connections (DPI)	90,000	90,000	125,000	
Maximum connections (DPI SSL)	25,000	25,000	25,000	
VPN	TZ300	TZ350	TZ400	
Site-to-Site VPN Tunnels	10	15	20	
IPSec VPN Clients (maximum)	1 (10)	1 (10)	2 (25)	
SSL VPN Licenses (maximum)	1 (50)	1 (75)	2 (100)	
Virtual Assist Bundled (Maximum)	1 (30-day trial)	1 (30-day trial)	1 (30-day trial	
Encryption/Authentication	DES, 3DES, AES (128, 192, 256-bit), MD5, SHA-1, Suite B Cry			
Key Exchange	Diffie Hellman Groups 1, 2, 5, 14			
Route-based VPN	RIP, OSPF			
Certificate Support	Verisign, Thawte, Cybertrust, RSA Keon, Entrust and Microso			
VPN Features	Dead Peer Detection, DHCP Over VPN, IPSec NAT Traversal,			
Global VPN Client Platforms Supported	Microsoft Windows Vista 32/64-bit, Windows 7 32/64-bit, W Windows 10			
NetExtender	Microsoft Windows Vista 32/64-bit, Windows 7, Windows 8. 10.4+, Linux FC3+/Ubuntu 7+/OpenSUSE			
Mobile Connect	Apple iOS, Mac OS X, Google Android, Kindle Fire, Windows			
Security Services	TZ300	TZ350	TZ400	
Deep Packet Inspection Services	Gateway Anti-Virus, Anti-Spyware, Intrusion Prevention, DPI			
	HTTP URL, HTTPS IP, keyword and content scanning, Active management on filtering categories, allow/forbid lists			
Content Filtering Service (CFS)		ering categories, allow/f		
-				
(CFS) Enforced Client Anti-Virus	management on filte			

0.0 \*\*\*\*\* Nenhuma classificação disponível

Application Visualization	Yes	Yes	Yes		
Application Control	Yes	Yes	Yes		
Capture Advanced Threat Protection	Yes	Yes	Yes		
Networking	TZ300	TZ350	TZ400		
IP Address Assignment	Static, (DHCP, PPPoE, L2TP and PPTP client), Internal DHCP				
NAT Modes	1:1, 1:many, many:1,	many:many, flexible N	AT (overlapping I		
Routing Protocols <sup>4</sup>	BGP, OSPF, RIPv1/v2,	, static routes, policy-b	ased routing, mu		
QoS	Bandwidth priority, n	nax bandwidth, guaran	teed bandwidth,		
Authentication	XAUTH/RADIUS, Acti	ve Directory, SSO, LDA	P, Novell, interna		
Local User Database	150				
VoIP	Full H.323v1-5, SIP	Full H.323v1-5, SIP			
Standards	TCP/IP, UDP, ICMP, H	TCP/IP, UDP, ICMP, HTTP, HTTPS, IPSec, ISAKMP/IKE, SNMP,			
Certifications	FIPS 140-2 (with Suite B) Level 2, UC APL, VPNC, IPv6 (Phase				
Certifications Pending	Common Criteria NDPP				
Common Access Card (CAC)	Supported				
High availability	Active/standby				
Hardware	TZ300	TZ350	TZ400		
Form Factor	Desktop				
Power Supply (W)	24W external	· · ·			
Maximum Power Consumption (W)	6.9 / 12.0	6.9 / 12.0	9.2 / 13.8		
Input Power	100 to 240 VAC, 50-6	50 Hz, 1 A			
Total Heat Dissipation	23.5 / 40.9 BTU	23.5 / 40.9 BTU	31.3 / 47.1 BT		
Dimensions (in)	1.3x5.3x7.5	1.4x5.3x7.5	1.3x5.3x7.5		
Dimensions (cm)	3.5x13.4x19	3.5x13.4x19	3.5x13.4x19		
Weight	0.73 kg / 1.61 lbs 0.84 kg / 1.85 lbs	0.73 kg / 1.61 lbs 0.84 kg / 1.85 lbs	0.73 kg / 1.61 0.84 kg / 1.85		
WEEE Weight	1.15 kg / 2.53 lbs 1.26 kg / 2.78 lbs	1.15 kg / 2.53 lbs 1.26 kg / 2.78 lbs	1.15 kg / 2.53 1.26 kg / 2.78		
Shipping Weight	1.37 kg / 3.02 lbs 1.48 kg / 3.26 lbs	1.37 kg / 3.02 lbs 1.48 kg / 3.26 lbs	1.37 kg / 3.02 1.48 kg / 3.26		
MTBF (Years)	56.1	56.1	54.0		
Environment	32-105° F, 0-40° C				
Humidity	5-95% non-condensi	ing			

0.0 \*\*\*\*\* Nenhuma classificação disponível

Regulatory Model (wired)	APL28-0B4	-	APL28-0B4
Major Regulatory Compliance (wired)	FCC Class B, ICES Class B, CE (EMC, LVD, RoHS), C- Tick, VCCI Class B, UL, cUL, TUV/GS, CB, Mexico CoC by UL, WEEE , REACH, KCC/MSIP	FCC Class B, ICES Class B, CE (EMC, LVD, RoHS), C- Tick, VCCI Class B, UL, cUL, TUV/GS, CB, Mexico CoC by UL, WEEE , REACH, KCC/MSIP	FCC Class B, IC Class B, CE (EM LVD, RoHS), C- Tick, VCCI Class UL, cUL, TUV/G CB, Mexico Co by UL, WEEE , REACH, KCC/M
Regulatory Model (wireless)	APL28-0B5	-	APL28-0B5
Major Regulatory Compliance (wireless)	FCC Class B, FCC RF ICES Class B, IC RF CE (R&TTE, EMC, LVD, RoHS), RCM, VCCI Class B, MIC/TELEC, UL, cUL, TUV/GS, CB, Mexico CoC by UL, WEEE , REACH	FCC Class B, FCC RF ICES Class B, IC RF CE (R&TTE, EMC, LVD, RoHS), RCM, VCCI Class B, MIC/TELEC, UL, cUL, TUV/GS, CB, Mexico CoC by UL, WEEE , REACH	FCC Class B, FC RF ICES Class B RF CE (R&TTE, EMC, LVD, RoH RCM, VCCI Clas B, MIC/TELEC, I cUL, TUV/GS, C Mexico CoC by UL, WEEE, REA

<sup>1</sup> Testing Methodologies: Maximum performance based on RFC 2544 (for firewall). Actual performactivated services.

 $^2$  Full DPI/GatewayAV/Anti-Spyware/IPS throughput measured using industry standard Spirent V Testing done with multiple flows through multiple port pairs.

 $^{3}$  VPN throughput measured using UDP traffic at 1280 byte packet size adhering to RFC 2544. Al change.

<sup>4</sup> BGP is available only on SonicWall TZ400, TZ500 and TZ600.

 $^{5}$  All TZ integrated wireless models can support either 2.4GHz or 5GHz band. For dual-band supproducts (SonicPoints)

\* Future use.

Shipping Policy	Security Policy	Return Policy	Privacy Policy	About Us
Shipping Folicy	becamy roney	ricturn roncy	i mucy i oncy	710001000

0.0 \*\*\*\* Nenhuma classificação disponível С