ITServing
SERVICE & SOLUTION

>200,000 Popular Intrusion Prevention/Detection Rules

SURICATA

Up to 2,000 devices

Model	ITS-2000RF
Capacity utilization	
Scales	*Core router: support max 2,000 devices* *Firewall: support max 1,600 devices* *IDS/IPS: support max 200 devices* *VPN: support max 160 devices*
Platform	
OS (Operating system /Open Souce)	FreeBSD/OPNsense®
Preinstalled software	ITServing®
License	All free *(Licensed under and OSI Approved License)*
Additional Support Options (yearly)	
ITS Standard (yearly)	24/7 support (1 year included)
ITS Plus (yearly)	**24/7 maintenace/system monitor & upgrade (Options)**
Physical interfaces	
RJ45 Ports	6 x 2.5 GbE RJ45
SFP+ Ports	-
USB Ports	4 x USB3.1
HDMI/VGA Port	1 x HDMI port
Console Port	1
Hardware Specifications	
CPU Cores	Intel® 4 core 8 threads (1.60GHz up to 4.20GHz)
Memory	16GB DDR4
Internal Storage (SSD)	128GB + **256GB/500GB (Options)**
Virtual Interfaces (802.1q VLANS)	4093
System performance	
Total Throughput	15Gbps
Firewall Throughput	14.4Gbps
Firewall Packets Per Second	1,200Kpps
Firewall Port to Port Throughput	2.4 Gbps
Firewall Port to Port Packets Per Second	200Kpps
Concurrent Sessions	1,594,000
New Connections Per Second	50,000
Firewall Latency (average)	100 µs
Firewall Policies (Recommended Maximum)	10,000
IPsec VPN Throughput (AES256GCM16)	2.5Gbps
IPsec VPN Packet Per Second (AES256GCM16)	220Kpps
Threat Protection Throughput	2Gpbs
Threat Protection Throughput Packet Per Second	163Kpps
Threat Protection Throughput	2.0 Gbps
High Availability with State Synchronisation	Yes (Requires Two)
Environment	
Power Adapter (included)	DC 12V5A/ 60W (AC TO DC, 100~240V)
Power Consumption	60W
Chassis	Aluminum Alloy
Heat Dissipation	Fanless (Passive Cooling with Heat Sink Aluminum Radiator)
Operating Temperature	-20 to 65°C (15 to 40°C recommended)
Storage Temperature	-20 to 70°C (15 to 50°C recommended)
Humidity	5%-95% non-condensing
Dimensions	
Height x Width x Length (mm)	52 x 155 x 126
Height x Width x Length (inches)	2.0 x 6.1 x 5.0
Form Factor	Wall Mounted/VESA/Desktop
Weight (Kg)	2.2
Regulatory Compliance	
Regulatory	FCC, CE, Rohs
Hardware Warranty	
ITS Standard	24 months
ITS Plus	36 months

The user interface is designed for normal business usage, large rulesets, high number of users or interface assignments may be less practical.

All measurements are based upon TCP traffic unless stated otherwise. Total Firewall Throughput is calculated based on maximum PPS and standard 1500 byte packets. Maximum PPS is measured using 500 byte packets. IPS performance is measured using ET Open and standard 1500 byte package size. SSL VPN is measured using AES256GCM16+SHA512. Concurrent sessions are based upon memory available, where one state consumes 1KB of memory and 1GB of memory is reserved for system tasks. Latency is measured as an average over 60 seconds.

Stateful firewall
◉ Filter by
- Source
- Destination
- Protocol
- Port
- OS (OSFP)

◉ Limit simultaneous connections on a per rule base
◉ Log matching traffic on a per rule bases
◉ Policy Based Routing
◉ Packet Normalisation
◉ Option to disable filter for pure router mode

Policy organisation
◉ Alias Support
- IP addresses
- Port ranges
- Domain names (FQDN)

◉ Interface Groups
- Create security zones with equal rules

◉ Rule Category
- Easy access rule sets

Granular control state table
◉ Adjustable state table size
◉ On a per rule bases
- Limit simultaneous client connection
- Limit states per host
- Limit new connections per second
- Define state timeout
- Define state type

◉ State types
- Keep
- Sloppy
- Modulate
- Synproxy
- None

◉ Optimisation options
- Normal
- High latency
- Agressive
- Conservative

2-Factor Authentication
◉ Supports TOTP
◉ Google Authenticator
◉ Support services:
- Captive Portal
- Proxy
- VPN
- GUI
- SSH / Console

802.1Q VLAN support
◉ max 4096 VLAN's

Link Aggregation & Failover
◉ Failover
◉ Load Balance
◉ Round Robin
◉ Cisco Ether Channel (FEC)
◉ 802.3ad LACP

Border Gateway Protocol

Other Interface types
◉ Bridged interfaces
◉ Generic Tunnel Interface (GIF)
◉ Generic Routing Encapsulation
◉ 802.1ad QinQ

Network Address Translation
◉ Port forwarding
◉ 1:1 of ip's & subnets
◉ Outbound NAT
◉ NAT Reflection

Traffic Shaping
◉ Limit bandwidth
◉ Share bandwidth
◉ Prioritise traffic
◉ Rule based matching
- Protocol
- Source
- Destination
- Port
- Direction

IGMP Proxy
◉ For multicast routing

Universal Plug & Play
◉ Fully supported

Dynamic DNS
◉ Selectable form a list
◉ Custom
◉ RFC 2136 support

DNS Forwarder
◉ Host Overrides
◉ Domain Overrides

DNS Server
◉ Host Overrides
- A records
- MX records

◉ Access Lists

DNS Filter
◉ Supports OpenDNS

DHCP Server
◉ IPv4 & IPv6
◉ Relay Support
◉ BOOTP options

Multi WAN
◉ Load balancing
◉ Failover
◉ Aliases

Load Balancer
◉ Balance incoming traffic over multiple servers

Network Time Server
◉ Hardware devices
- GPS
- Pulse Per Second

Intrusion Detection & Prevention
◉ Inline Prevention
◉ Integrated rulesets
- SSL Blacklists
- Feodo Tracker
- Geolite2 Country IP
- Emerging Threats ETOpen

◉ SSL Fingerprinting
◉ Auto rule update using configurable cron

Captive Portal
◉ Typical Applications
- Guest Network
- Bring Your Own Device (BYOD)
- Hotel Wifi Access
- Template Management
- Multiple Zones

◉ Authenticators
- LDAP
- Radius
- Local User Manager
- Vouchers / Tickets
- Multiple
- None (Splash Screen Only)

◉ Voucher Manager
- Multiple Voucher Databases
- Export vouchers to CSV

◉ Timeouts & Welcome Back
◉ Bandwidth Management
- Share evenly
- Prioritise
- Protocols
- Ports
- IP

◉ Portal bypass
- MAC and IP whitelisting

◉ Real Time Reporting
- Live top IP bandwidth usage
- Active Sessions
- Time left
- Rest API

Virtual Private Networks
◉ IPsec
- Site to Site
- Road Warrior

◉ OpenVPN
- Site to Site
- Road Warrior
- Easy client configuration exporter

◉ Tinc (Plugin)
- Full mesh routing

◉ **WireGuard**
◉ Zerotier

High Availability
◉ Automatic hardware failover
◉ Synchronised state table
◉ Configuration synchronisation

Caching Proxy
◉ Multi interface
◉ Transparent Mode
◉ Support SSL Bump
◉ SSL Domain only (easy filtering)
◉ Access Control Lists
◉ Blacklists
◉ Category Based Web-filter
◉ Traffic Management
◉ Auto sync for remote blacklists
◉ ICAP (supports virus scan engine)

Backup & Restore
◉ History & Diff support
◉ File Backup
◉ Cloud Backup

SNMP
◉ Monitor & Traps

Diagnostics

◉ Filter reload status
◉ Firewall Info (pfInfo)
◉ Top Users (pfTop)
◉ Firewall Tables
- Aliases
- Bogons

◉ Current Open Sockets
◉ Show All States
◉ State Reset
◉ State Summary
◉ Wake on LAN
◉ ARP Table
◉ DNS Lookup
◉ NDP Table
◉ Ping
◉ Packet Capture
◉ Test Port
◉ Trace route

Enhanced Reporting
◉ Network Flow Analyser 'Insight'
- Fully Integrated
- Detailed Aggregation
- Graphical Representation
- Clickable and Searchable
- CVS Exporter

◉ System Health
- Round Robin Data
- Selection & Zoom
- Exportable

◉ Traffic Graph
- Live Traffic Monitoring

Network Monitoring
◉ Netflow Exporter
- Version 5 & version 9
- Local for 'Insight'

Firmware
◉ Easy Upgrade
- Reboot warning for base upgrades

◉ SSL Flavour selectable
- OpenSSL
- LibreSSL

◉ Selectable Package Mirror
◉ Reinstall Single Package
◉ Lock Package (prevents upgrade)
◉ Audit Feature
- Check installed packages for known security vulnerabilities

◉ Plugin Support
- VMware tools
- Xen tools
- Tinc
- HAProxy -Load balancer
- Let's Encrypt

REST API
◉ ACL support

Online Documentation
◉ Free & Searchable