Lightning Wire Labs

IPFire Appliances

About Our IPFire Appliances

Lightning Wire Labs offers hardware appliances that are built according to our own high standards and certified by IPFire developers.

Every appliance is perfectly built for IPFire to the most our of hardware as well as software. Selected components guarantee a long lifetime, stability and maximum performance.

In addition to our appliance products, we offer support services around the appliances and for IPFire.

For more information, visit `https://www.lightningwirelabs.com/`

IPFire Enterprise Appliance

Our flagship appliance for our enterprise customers. Packaged with a powerful Intel(R) Xeon(R)-D Processor and two 10G Ethernet Controllers it transfers data faster than any other appliance.
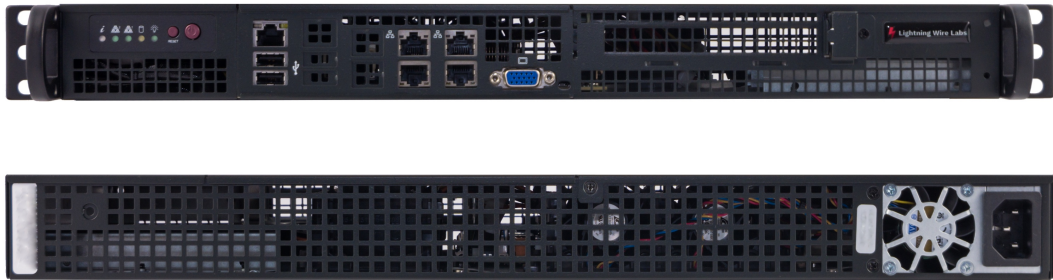
Specifications

Our appliances are assembled in Germany with carefully selected components that guarantee our product's longevity. They have proven to give best performance and stability, and are friendly to the environment, too.

Nothing is spared in this appliance to get the most out of IPFire. At its heart, we are using an Intel Xeon-D processor which is fast, but also energy-efficient with a focus on network applications.

Processor	Intel(R) Xeon(R) processor D-1541 with AES-NI Crypto Acceleration
Memory	16 GB DDR4-2400 DRAM
Storage	256 GB NVMe SSD
Network	2x Ten-Gigabit Ethernet Controller via SoC 2x Intel i350-AM2 Gigabit Ethernet Controller Dedicated IPMI
Power	100-240V - 50-60 Hz - 34-77W
I/O	4x RJ45 1x RJ45 (IPMI) 1x VGA 2x USB 3.0
Expension	1x PCIe 3.0 x16
Dimensions (w x h x d)	437 x 43 x 249 mm
Weight	4kg
Environment	10-35°C, 50-95F fan-cooled
Certifications	CE, RoHS, ErP/EuP
Warranty	24 months

This appliance comes with two Ten-Gigabit Ethernet Controllers as well as two Gigabit Ethernet Controllers. We have kept it simple for customers who are not running their network on 10G, yet and made this compatible to a standard Gigabit network by using regular RJ45 connectors - this way, you are always ready for the future and your business has enough room to grow.

It is able to saturate its links even when packets are encrypted for a VPN. A real flagship that gets all out of IPFire.

This is designed for larger businesses and data centre applications - serving hundreds or thousands of users. It can be extended with SFP+ extension cards to add fibre ports or add more 10G ports.

Throughputs

Routed Bandwidth	10/1 GBit/s (bi-directional)
AES-256-GCM	~2437 MByte/s
AES-256-CBC	~422 MByte/s
AES-128-GCM	~3394 MByte/s
AES-128-CBC	~590 MByte/s

IPFire Business Appliance

Our best-selling firewall appliance for everyone. This appliance is a real allrounder. Power-efficient with a modern Eight-Core Intel(R) Processor, versatile with four Intel(R) Gigabit Ethernet Controllers.

Specifications

Our appliances are assembled in Germany with carefully selected components that guarantee our product's longevity. They have proven to give best performance and stability, and are friendly to the environment, too.

This firewall appliance connects each business or authority securely with the rest of the world.

Processor	Intel Atom C3758 @ 2.20GHz Octo Core with AES-NI Crypto Acceleration
Memory	8 GB DDR4-2400 DRAM
Storage	256 GB NVMe SSD
Network	4x Gigabit Ethernet Controllers via C3000 SoC Dedicated IPMI
Power	100-240V - 50-60 Hz - 25-32W
I/O	4x RJ45 1x RJ45 (IPMI) 1x VGA 2x USB 2.0
Expension	1x PCIe 3.0 x4
Dimensions (w x h x d)	437 x 43 x 249 mm
Weight	4kg
Environment	0-40°C, 32-104F fan-cooled
Certifications	CE, RoHS, ErP/EuP
Warranty	24 months

Its versatility is possible because of its fast, modern, but at the same time power-efficient processor. It has all four Gigabit Network Controllers already integrated into it. All of these crucial elements make this our best-selling product.

Comprised with loads of power for applications like the feature-rich web proxy, crypto-acceleration built into the CPU for maximum throughput and security for VPNs, as well as loads of memory for Intrusion Prevention System make this system a perfect fit almost everywhere.

This appliance brings the best of IPFire to every medium-sized business, school, authority and of course runs in data centres, too. We recommend using it in networks with several hundreds of users.

Throughputs

Routed Bandwidth	1 GBit/s (bi-directional)
AES-256-GCM	~742 MByte/s
AES-256-CBC	~402 MByte/s
AES-128-GCM	~897 MByte/s
AES-128-CBC	~560 MByte/s

IPFire Mini Appliance

This small box is a real firewall - with all the features of its big brothers. A quad-core processor powers it and 4GB of memory grant enough space for speedy applications. It is versatile, has various connectivity options, and uses minimal power.

Specifications

Our appliances are assembled in Germany with carefully selected components that guarantee our product's longevity. They have proven to give best performance and stability, and are friendly to the environment, too.

This appliance comes in a small form-factor aluminium case which is passively cooled. Its size and robustness make it perfect to be deployed in many environments inside and outside of the server room.

Its key features are the four Gigabit Ethernet Controllers that allow it to connect networks together and provide decent throughput.

With its AES-NI acceleration, this appliance is perfect as a VPN endpoint to either connect your office to the data centre, your employees to the office, or just multiple offices to each other.

Coming with the same software as its big brothers, there is nothing it cannot do. However, this appliance is designed for small offices of up to 20 people and works well in home offices and IoT environments, too.

Optionally, this appliance can be extended with either a WiFi module to add a Dual MIMO 802.11ac/a/g/n wireless access point, or a LTE module to connect to 4G/3G or GSM networks.

Processor	AMD Embedded G series GX-412TC @ 1GHz Quad Core with AES-NI Crypto Acceleration
Memory	4 GB DDR3-1333 DRAM, ECC
Storage	16 GB SATA SSD
Network	4x Gigabit Ethernet Adapters Intel i211 AT Chipset
Power	12V DC - 6-8W PSU: 100-240V - 50-60 Hz
I/O	DB9 Serial Port 2x USB 3.0 external 2x USB 2.0 internal
Expension	1x full miniPCIe 1x miniPCIe USB-only + SIM
Dimensions (w x h x d)	168 x 30 x 157 mm
Certifications	CE, RoHS, ErP/EuP
Warranty	24 months

Throughputs

Routed Bandwidth	1 GBit/s (bi-directional)
AES-256-GCM	~463 MByte/s
AES-256-CBC	~215 MByte/s
AES-128-GCM	~533 MByte/s
AES-128-CBC	~293 MByte/s