



**EcoFilter** is wire-speed URL-filtering equipment for all service provider's traffic. Provides forbidden sites from the list of Roskomnadzor (ILV), the Ministry of Justice, as well as the user lists 100% blocking.

**EcoFilter** functionality allows a provider to meet the regulations with regard to filter Internet unwanted and prohibited resources and also provide services with large filtering lists (up to 30 mlns URLs) such as Children's Internet. The device supports URL-filtering for HTTP and HTTPS on all the TCP-ports.

The product is continuously updated following the requirements of the legislation.

URL filtering lists can be assigned to all subscribers at once or to each one depending on the service plan. Radius or proprietary protocol are used for the user authentication. The device can be supplemented by the service gateway functionality (policing for subscribers, redirections to the billing page, URL-based open garden, URL-based policing, CG-NAT).

**EcoFilter** is a Russian product which is approved by Interdepartmental Expert Council's decision (22.09.2016).

EcoFilter series	2020 / 2040	4080	4120 / 4160
Throughput	24 / 34 Gbps	60 Gbps	120 / 160 Gbps
Packets Per Second	16.2M	49.5M	64.8M
Connection Setups Per Second	2.3M	2.5M	5M
Concurrent Sessions	32 million	40 million	150 million
Network Interface			
10 GE Fiber (SFP+)	2 / 4	8	12 / 16
1 GE Copper	4	-	-
Logging Interface	2 x 10/100/1000BaseT	1 x 10/100/1000BaseT	1 x 10/100/1000BaseT
Management Interface	1 x 10/100/1000BaseT	1 x 10/100/1000BaseT	1 x 10/100/1000BaseT
Console Port	RJ45 (RS232C)	RJ45 (RS232C)	RJ45 (RS232C)
System Storage	CF Industrial SLC	CF Industrial SLC	CF Industrial SLC
Power Consumption Typical/Max	140W/170W	250W/285W	340W/400W
Power Supply	Dual 200W RPS 100-240 VAC (-36-72 DC)	Dual 500W RPS 100-240 VAC (-40-72 DC)	Dual 500W RPS 100-240 VAC (-40-72 DC)
Cooling Fan	Standard Fans	Hot Swap Smart Fans	Hot Swap Smart Fans
Dimensions	430mm x 400mm x 44mm	440mm x 576mm x 44mm	440mm x 576mm x 44mm
Rack Unit (Mountable)	1U	1U	1U

Today the most common URL-filtering scheme is a method in which DPI is not directed all traffic, but only a small part of it, pre-filtered by routers (ACL, pulling BGP-routing, etc.).

Unlike most of the analogs **EcoFilter** has sufficient capacity and allows to analyze all providers traffic for all TCP-ports, which guarantees 100% filtering according to “Inspector” system.

DPI-system performance is up to 160 Gbit/s for 1U, which is the best result in Russia and a good result, even by world standards. This performance can be easily scaled by combining multiple devices if it is necessary.

In **EcoFilter** provides mechanisms for detecting the URL in the HTTP requests, even if the subscriber uses the means to bypass the block (access by non-standard ports on the server, URL masking by fragmentation GET-request, non-standard sequence headers, etc.).

**EcoFilter** allows the extraction of all GET-requests of subscribers with a recording them to an external server (BIG data collection). That makes it possible to analyze and build profiles of interest and risks — both for the individual users and for the whole subscribers base. Also this functionality allows you to bring a new level of work with the outflow and the ability to predict the loss of a particular subscriber.

