



EcoBRAS is a Services Gateway, provided:

- Control of the subscriber access to the data services;
- Access speed restricting;
- Deactivating of the subscriber with redirecting him to the page of the need to replenish the balance notification;
- Demonstration to the subscribers information messages by forwarding to the portal.

The device can handle up to **250 thousand active concurrent users**, for whom exists the speed limit rules for both directions.

Performance of the solution is **up to 160 Gbps per unit**, which exceeds the foreign analogues.

Subscriber traffic speed limiting is carried out in both directions (RX/TX), independently, with increments of 64 Kbps.

It is possible to create an “Open Garden” with a list of networks available for the disconnected subscribers: DNS-servers, company sites, payment systems, banks and so on.

EcoBRAS 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

To limit the upload and download speed or to redirect to a website for refilling the balance of user account, **EcoBRAS** uses a set of configurable policies and related services.

Services are a set of actions performed in the case when the source or destination address of session matches to the specified Access Control List (ACL). The following operations may be performed: 'pass' action (with a speed limit), 'block' action and 'redirect to the specified URL' action.

EcoBRAS may specify lists of the URLs (“white” or “black” lists) as a policy in case of using additional functional of EcoFilter. (You have to purchase EcoFilter upgrade license).

Up to six services may be active simultaneously for each user. Services may be specified statically or obtained dynamically via the RADIUS protocol. Changing the set of services and their parameters for the subscriber may be performed using the CoA feature of the RADIUS protocol.

The IP-address and the MAC-address of the user may be identified by the RADIUS protocol in the moment of connection setup. For unknown subscribers **EcoBRAS** may provide redirection to the web-service for the user identification using third-party methods (for example, by SMS). According to the subscriber's profile, it is assigned a set of services, each one takes into account the volume of transmitted and received data and sends it to the billing system in the RADIUS Accounting messages.

In addition, the device supports a proprietary protocol for interaction with the billing system (description of the protocol is available on request).

It is possible to manage a set of subscriber services in real-time (as in the case of the CoA RADIUS) with using multiple billing systems together.

Vendor provides services for integration **EcoBRAS** with any billing system. It may be performed using both an open API and the RADIUS protocol.

