

## LOW COST ROUTERS TEST

### N 300Mbps STANDARD






During the tests, we used the software to measure data packets transfer speed between the server and the client. We tested the devices based on the following characteristics:

- functionality
- signal strength
- performance and practical application

#### 1. Functionality.

Below is a table which represents all main features that should have a good router, to be most universal when it comes to use in home and office:

- the number of modes (Wireless ISP Client Router, Wireless Client, Repeater, Router, Bridge with AP, Client)
- access control functions ( MAC, URL, IP, PORT filtering )
- functionality in the network (IPV6, VLAN, IPTV Multi SSID, QoS)

Producent	TOTOLINK	Netis	Tp-Link	Lb-Link	Comnet
Model	N300RT	WF2419	TL-WR841N	BL-WR2000	CWR 624
Picture					
Warranty	36	12	24	12	12
Hardware Features					
Button	1 *RST/WPS Button 1 * Power ON/OFF Button	1*WPS Button 1*Default Button	1 *RST/WPS Button 1*WiFi ON/OFF Button 1*Power ON/OFF Button	1 *RST/WPS Button	1 * Power ON/OFF Button
Software Features					
Capacity	300Mbps	300Mbps	300Mbps	300Mbps	300Mbps
WAN Type	DHCP/Static IP/PPPoE(dual access)/PPTP(dual access) /L2TP(dual access)	DHCP, Static IP, PPPoE, L2TP, PPTP, Dual Access, WISP	Dynamic IP/Static IP/PPPoE/ PPTP/L2TP/BigPond	DHCP/Static IP/PPPoE/ PPTP /L2TP	DHCP/Static IP/PPPoE
Operation Mode	Wireless ISP Client Router, Wireless Client, Repeater(Range Extender), Router, Bridge with AP, Client	AP, WDS, AP+WDS, Repeater, Client, Multiple AP	AP, WDS, AP+WDS	Router, Client Router, Repeater(Range Extender), Bridge with AP, Client	AP, WDS, AP+WDS
Schedule	Wireless Scheduler Reboot Scheduler	X	Reboot Scheduler	X	X
IPV6	√	X	X	X	X
Access Control	MAC Filtering IP Filtering Port Filtering URL Filtering	IP Filtering MAC Filtering Domain Filtering	IP Address Filter MAC Address Filter Domain Filter IP and MAC Address Binding	IP Filtering MAC Filtering URL Filtering	MAC Filtering IP Filtering Port Filtering URL Filtering
TR-069	√	X	X	X	√
VLAN	√	√	√	X	√
IPTV	√	√	√	√	√
Multi-SSID	√	√	X	√	√
QoS	√	√	√	√	√
Repeater	√	√	X	√	√

## 2. Signal strength.

Signal strength was measured by phone HUAWEI G620S and application Wifi Analyzer.

Operational channel always was the same for all routers (channel 4 2427MHz and 40MHz bandwidth) and all routers was in the same location.

Signal strength was measured at the following distances from the devices

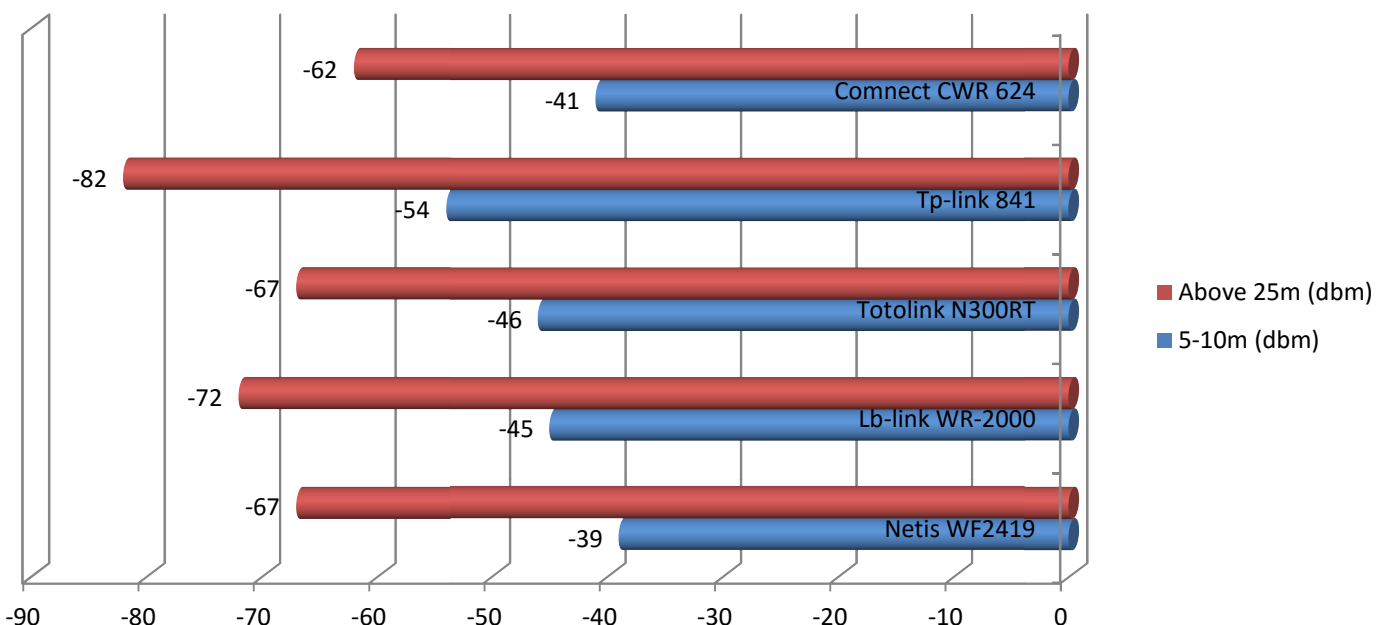
– 5-10m from the router and over 25m

Below are the results for distance measurement:

5-10m for routers



above 25m for routers



The graph above shows signal strength. Of course, in this situation, the closer to zero the better...

### 3. Performance.

Performance test was made in such a way that it is a simulation of home environment - daily network usage by household members.

We made a few measurements of throughput using HP laptop equipped with a wireless card - RALINK RT3290 802.11 bgn, Lenovo laptop working on the wireless card Karta Intel(R) Dual Band Wireless-AC 3160, HUAWEI G620S phone and Mikrotik RB2011iL, while keeping various distances from routers (5-10m and 25m above).

The results were based on the following programs:

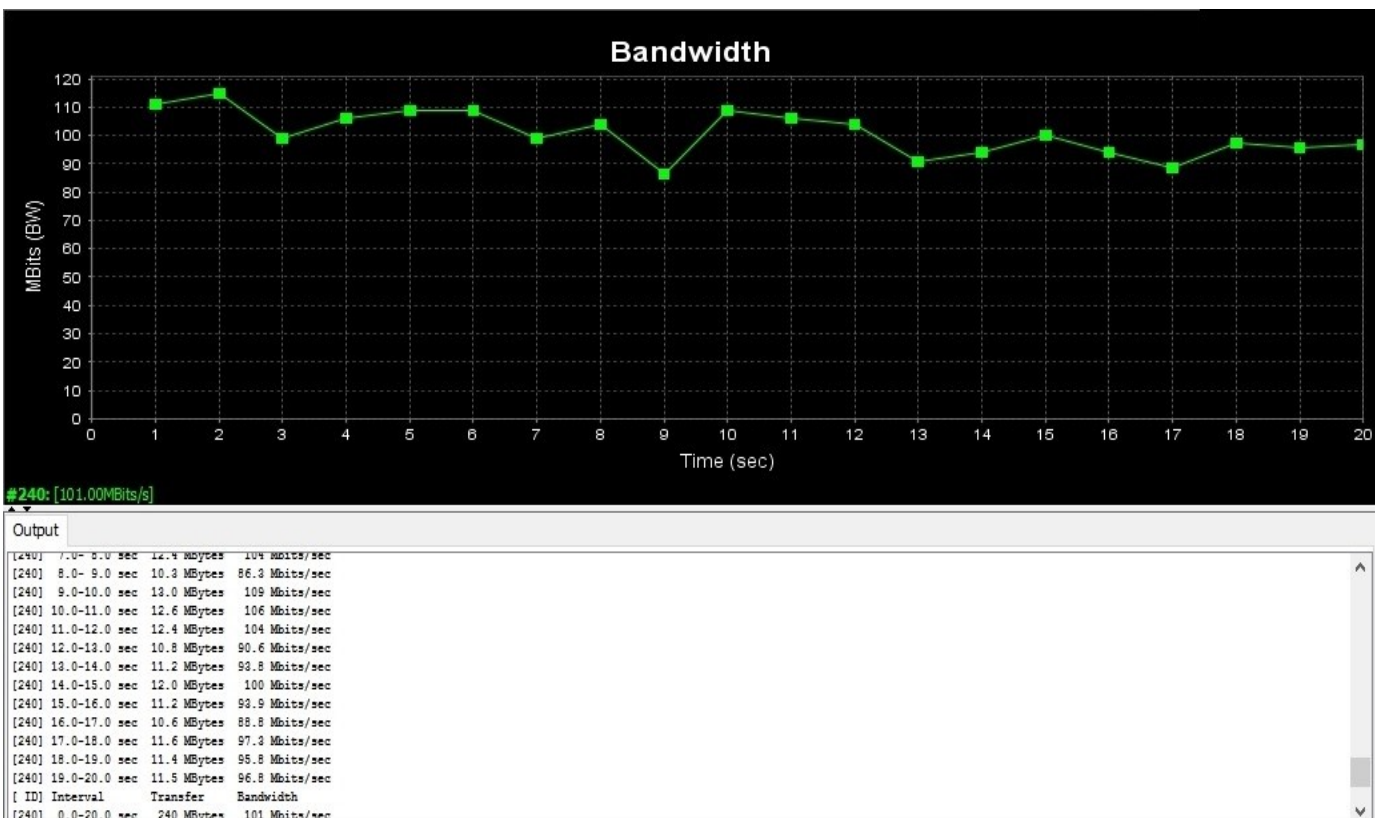
- iperf, actually Jperf w wersji 2.0.2 – graphical user interface working on JAVA platform
- Mikrotik Bandwidth Test version 0.1

Let`s move on to the tests.



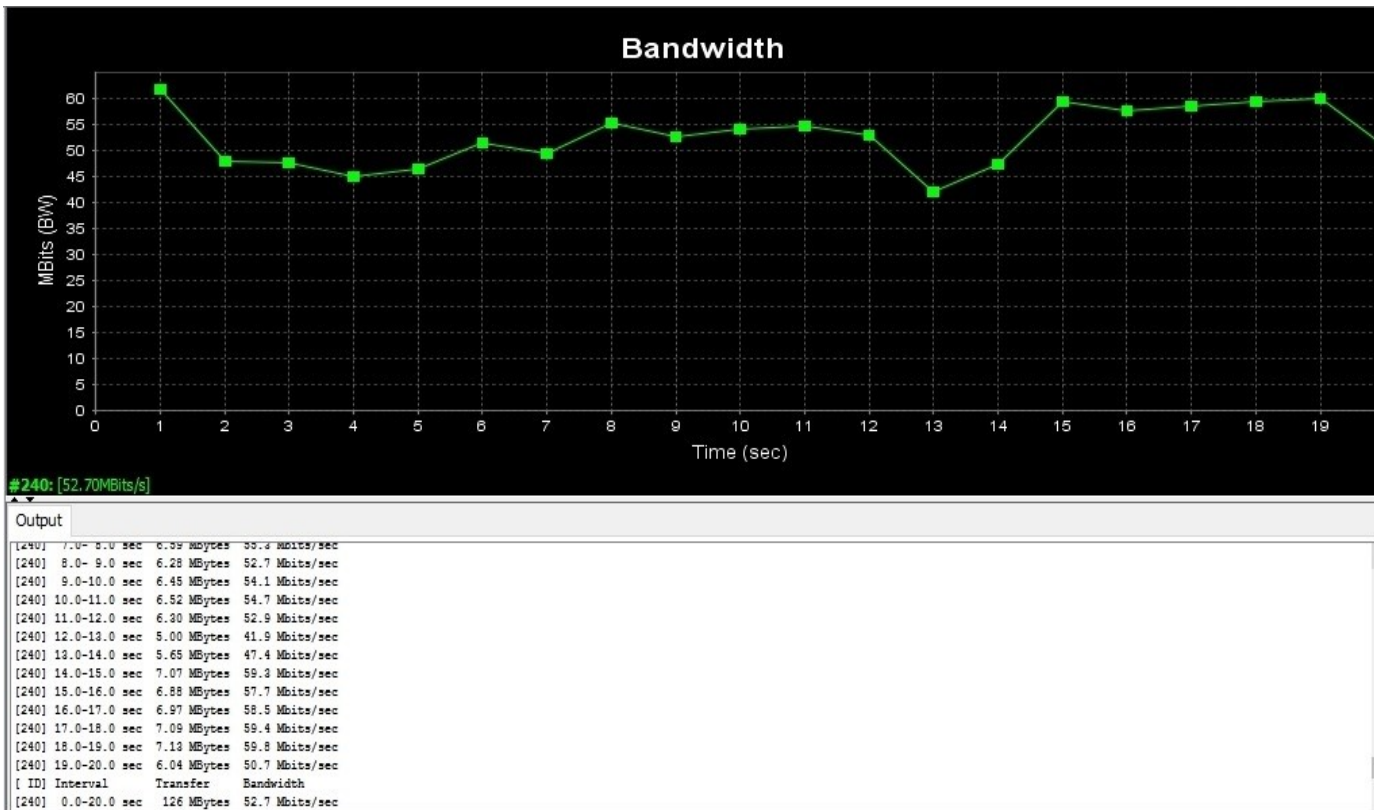
TOTOLINK N300RT

#### UDP - Jperf



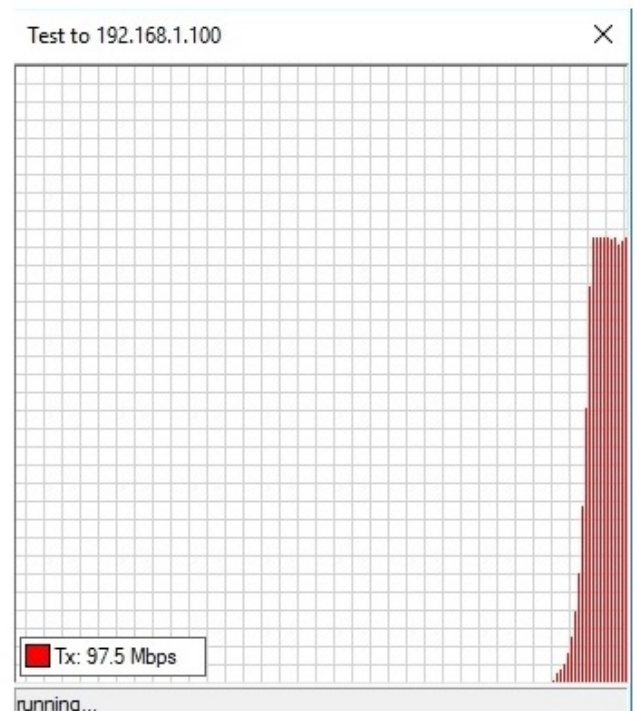
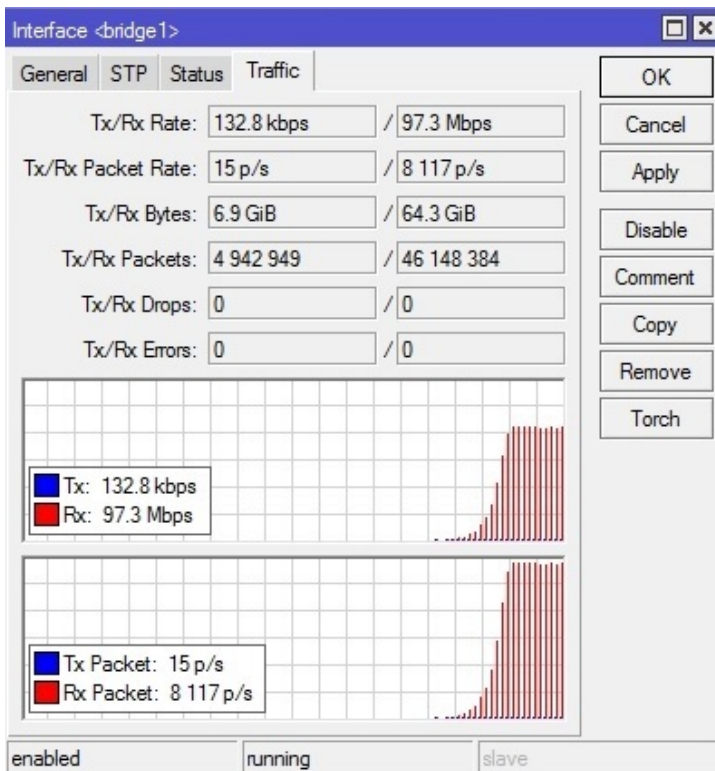
**Result: 101 Mbit/s**

## TCP - Jperf



**Result: 52 Mbit/s**

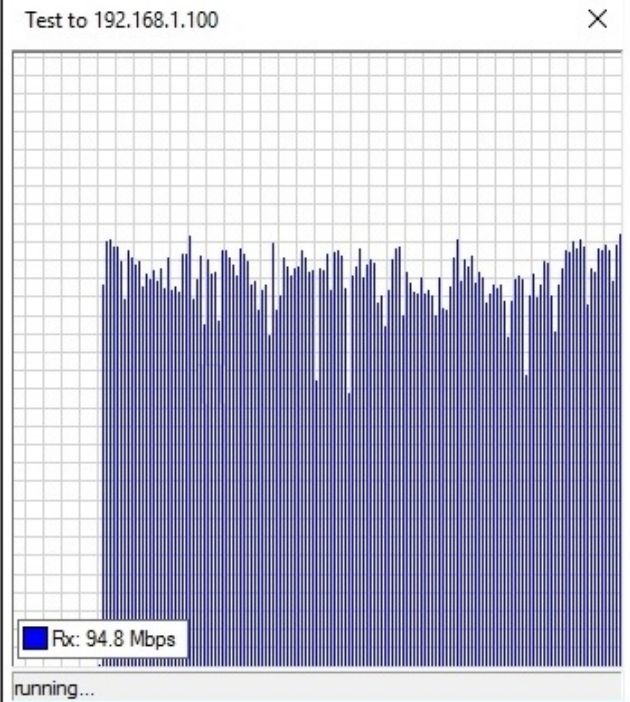
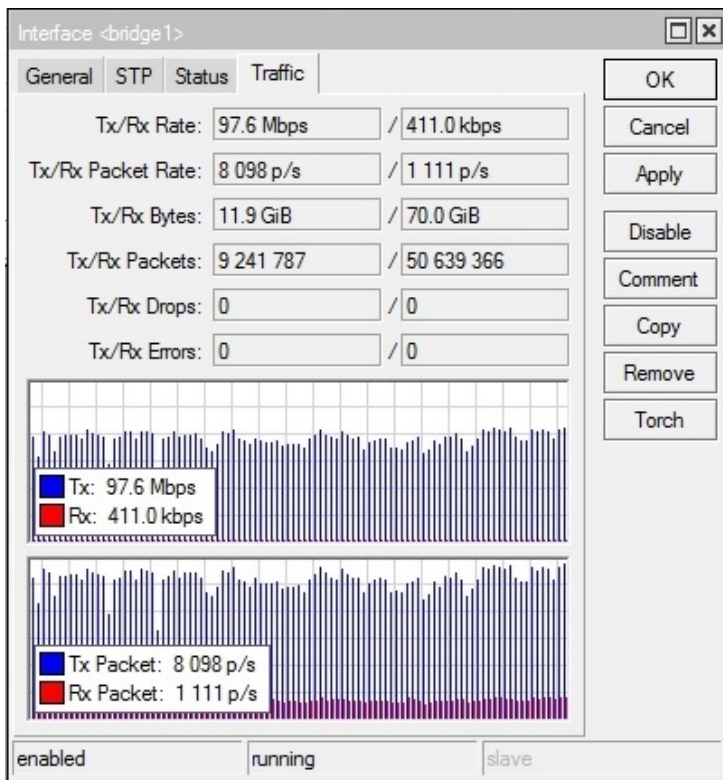
## UDP send - Mikrotik Bandwidth Test



**Result: 97 Mbit/s i 8100 p/s**

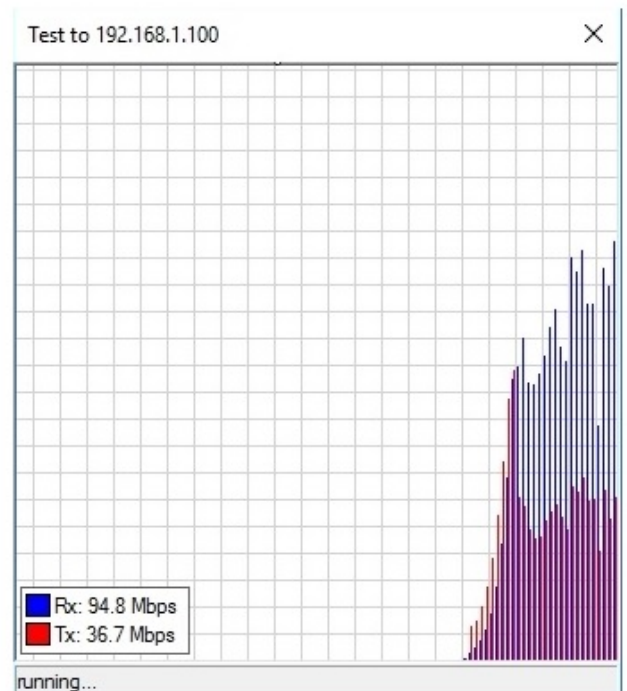
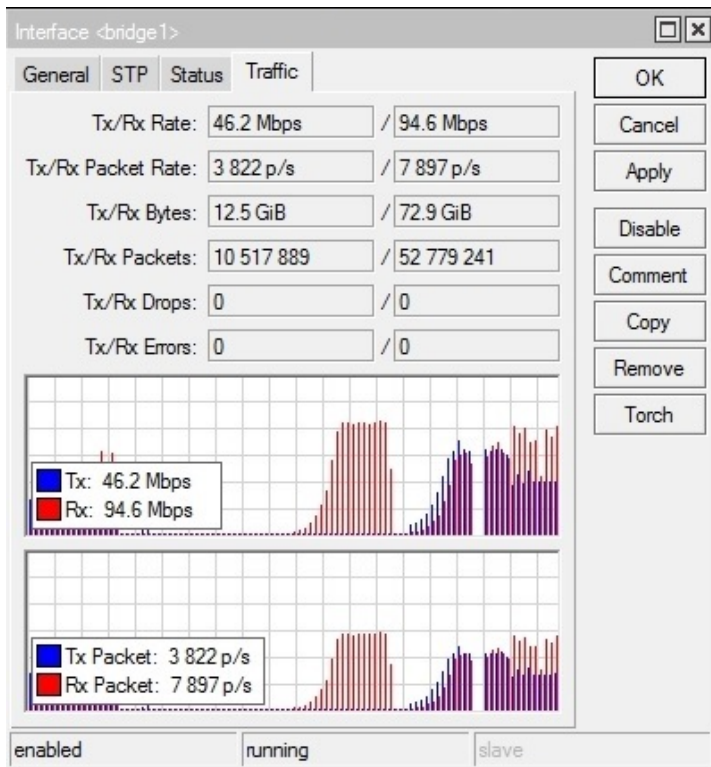


## TCP receive - Mikrotik Bandwidth Test



**Result: 95 Mbit/s i 8100 p/s**

## UDP both - Mikrotik Bandwidth Test

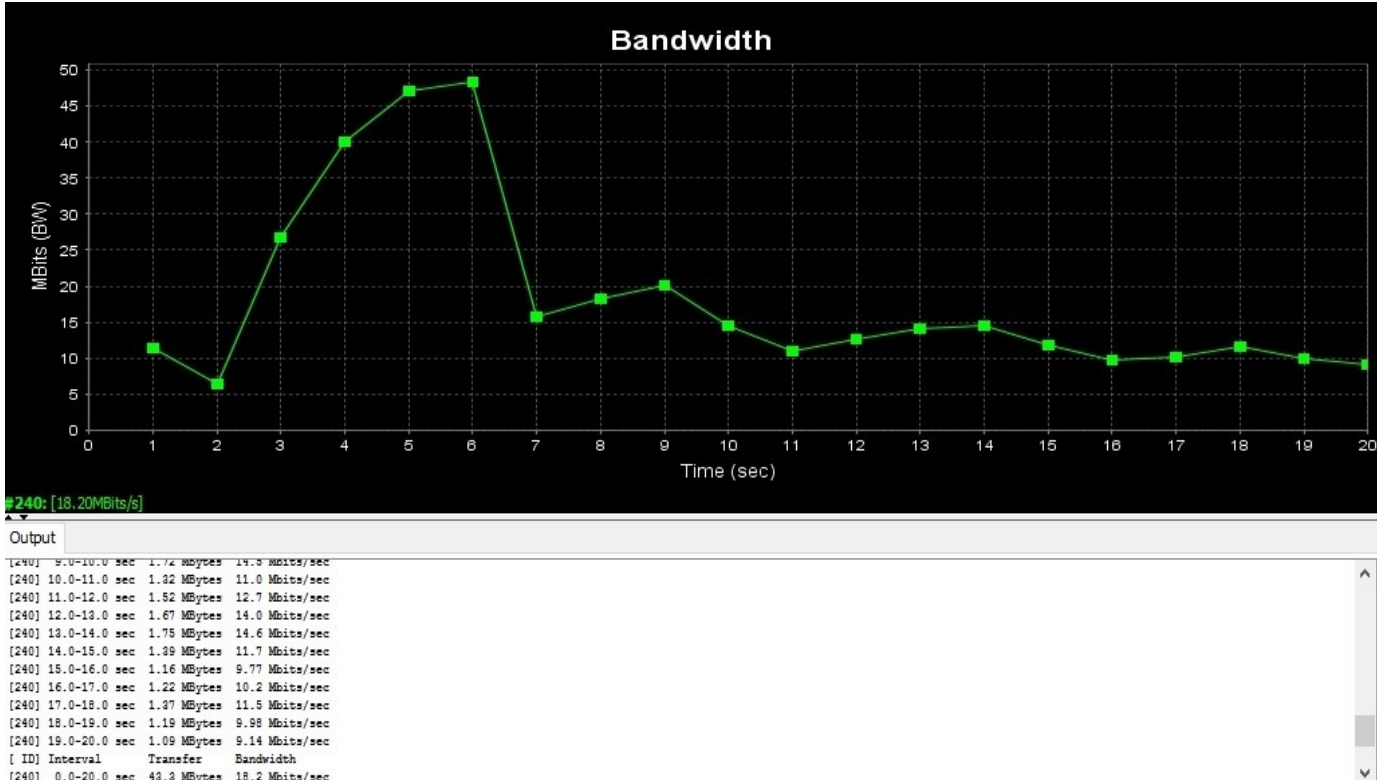


**Result: 131 Mbit/s i 11 700 p/s**



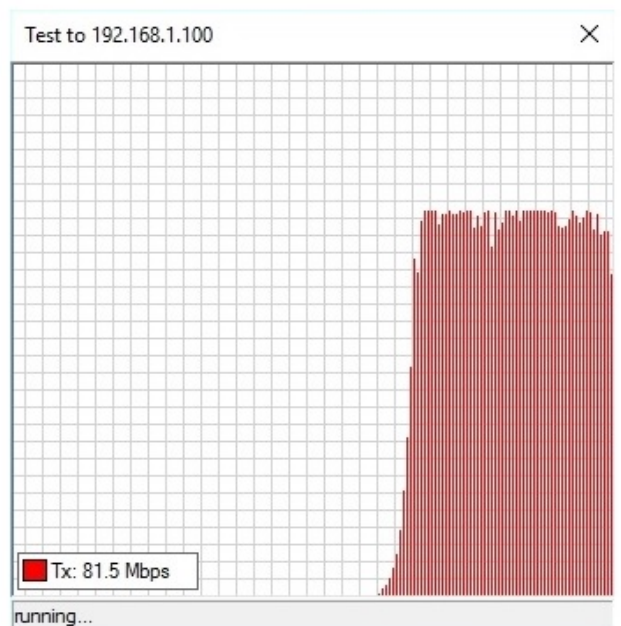
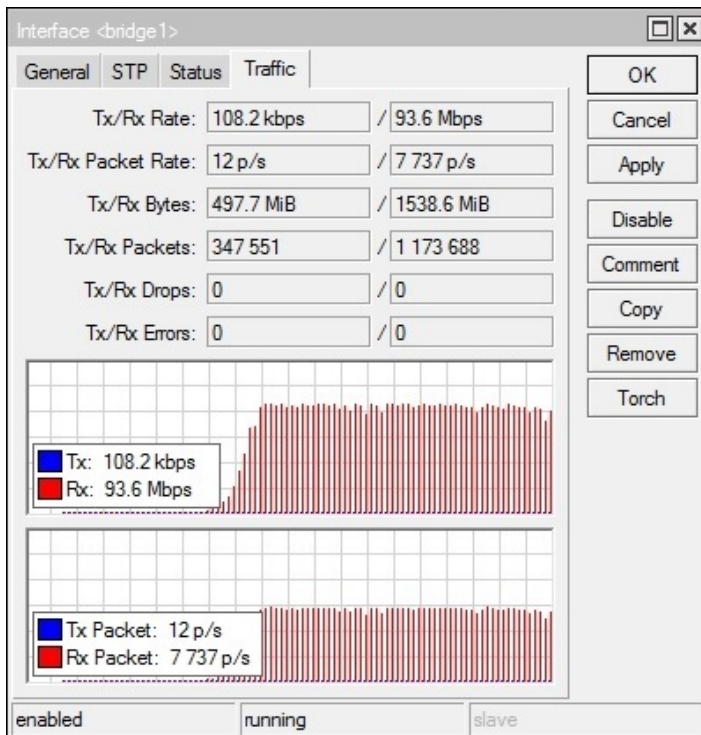
### NETIS WF2419

#### UDP - Jperf



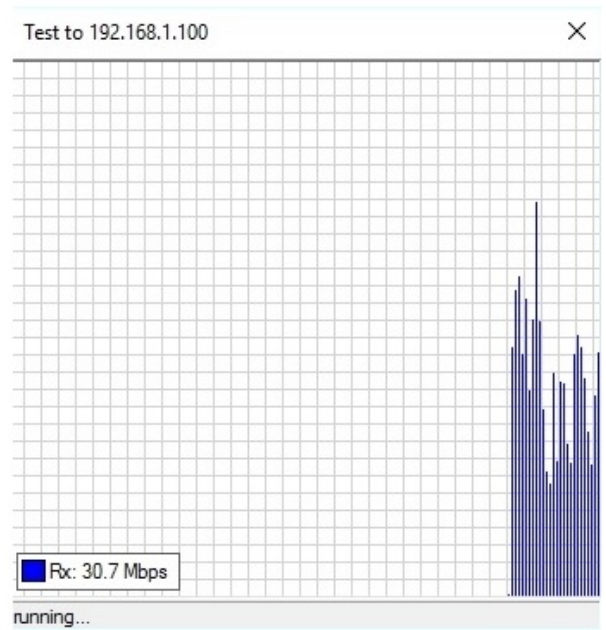
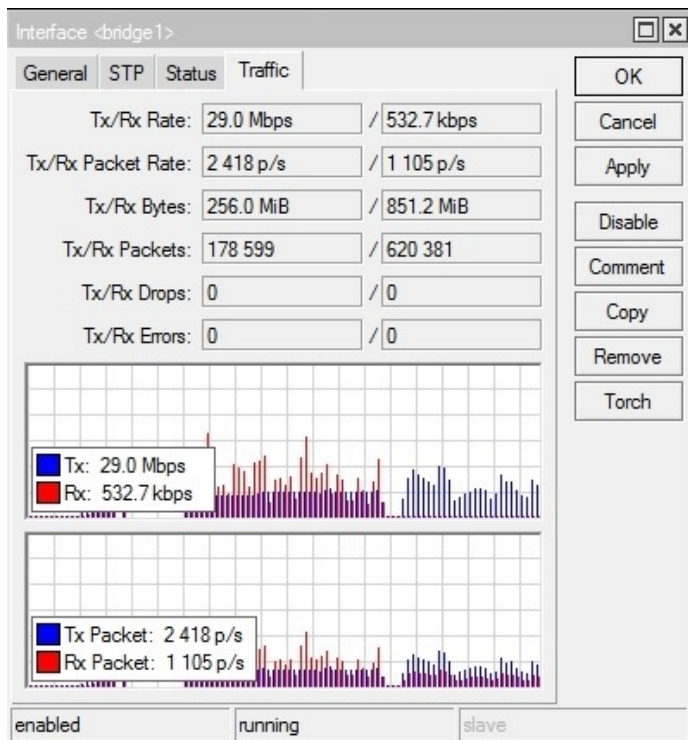
Result: 18 Mbit/s

#### UDP send - Mikrotik Bandwidth Test



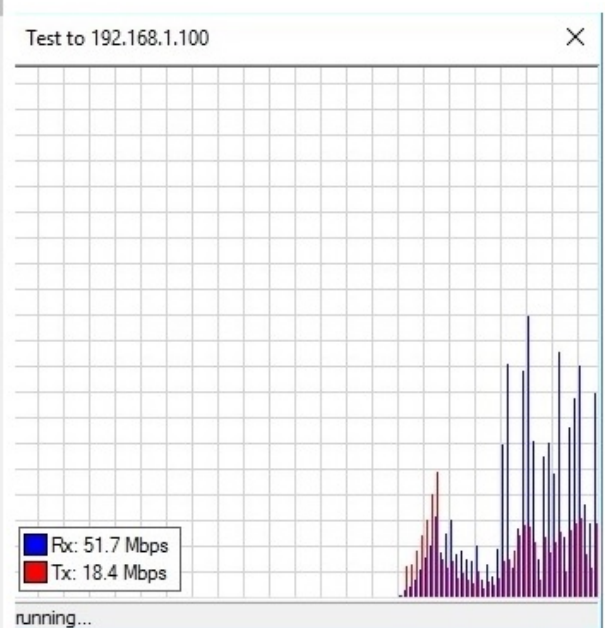
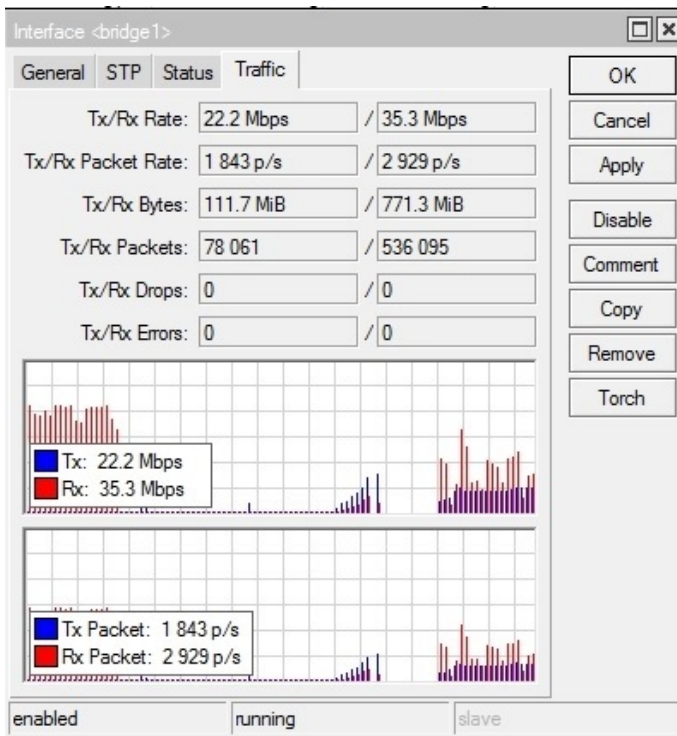
Result: 82 Mbit/s i 7700 p/s

### TCP receive - Mikrotik Bandwidth Test



**Result: 30 Mbit/s i 2400 p/s**

### UDP both - Mikrotik Bandwidth Test



**Result: 70 Mbit/s i 4770 p/s**

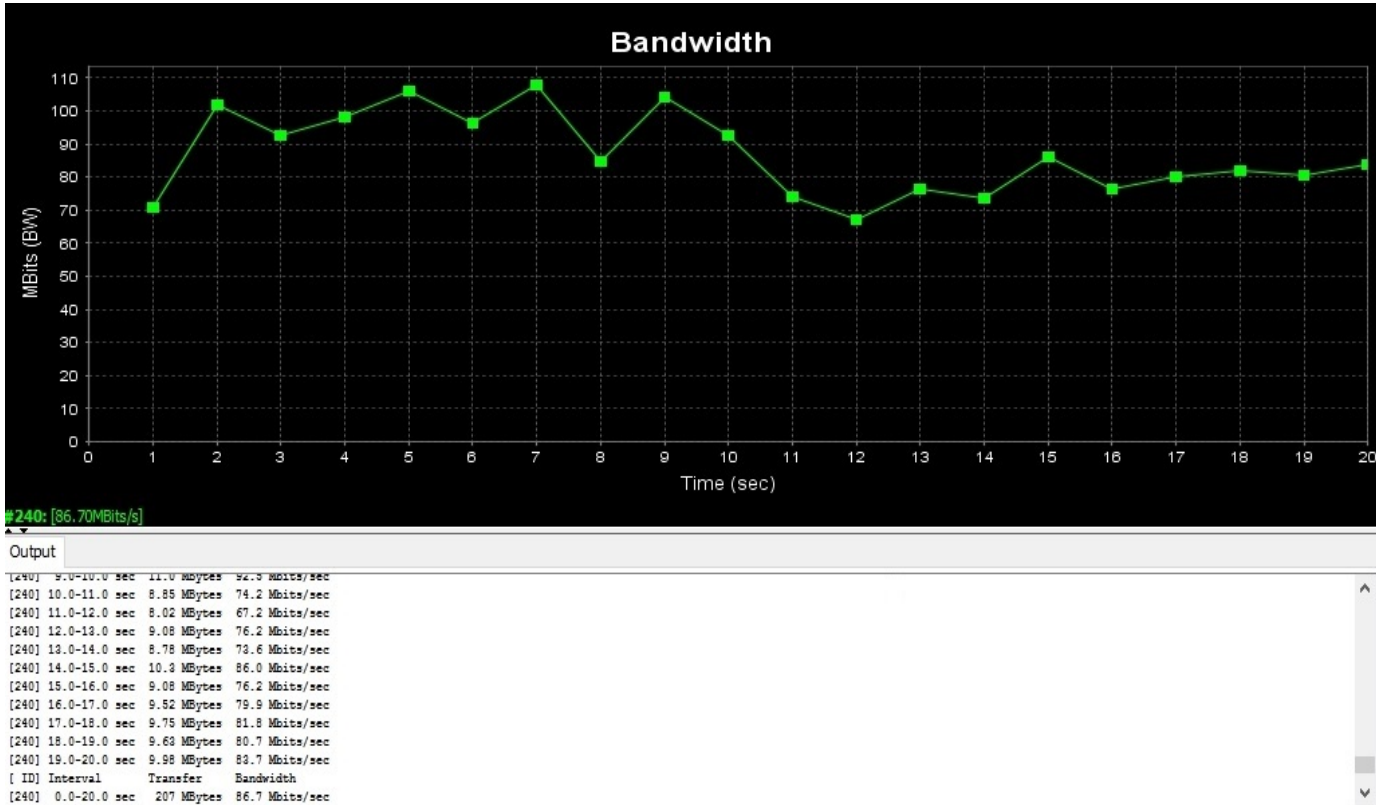




**TP-LINK®**  
The Reliable Choice

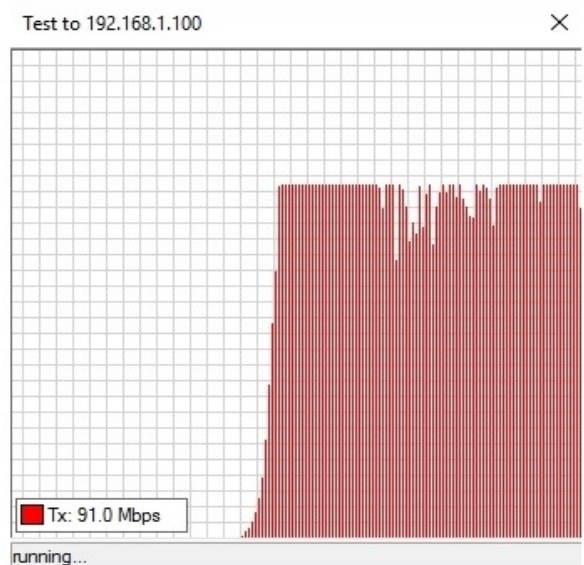
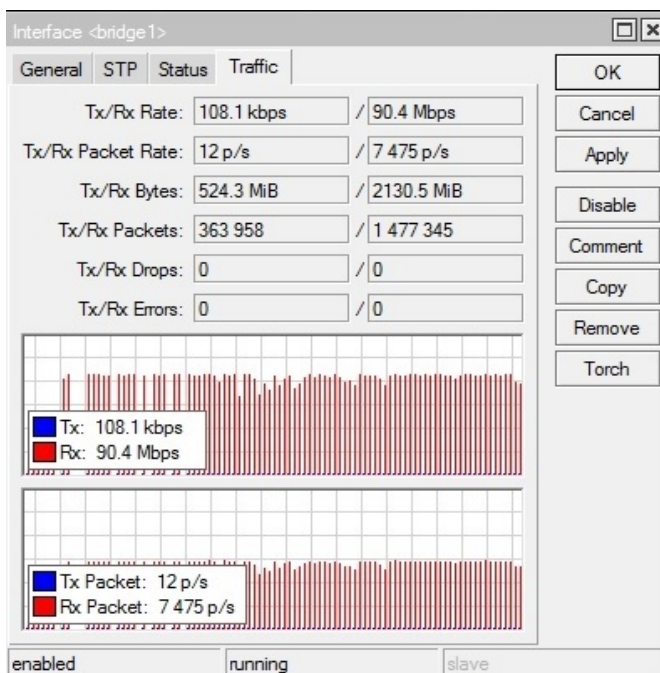
TP-LINK 841N

**UDP - Jperf**



**Result: 86 Mbit/s**

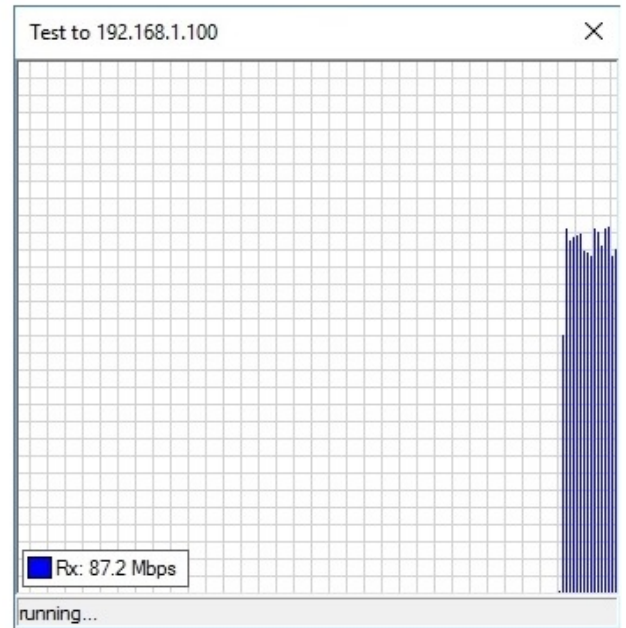
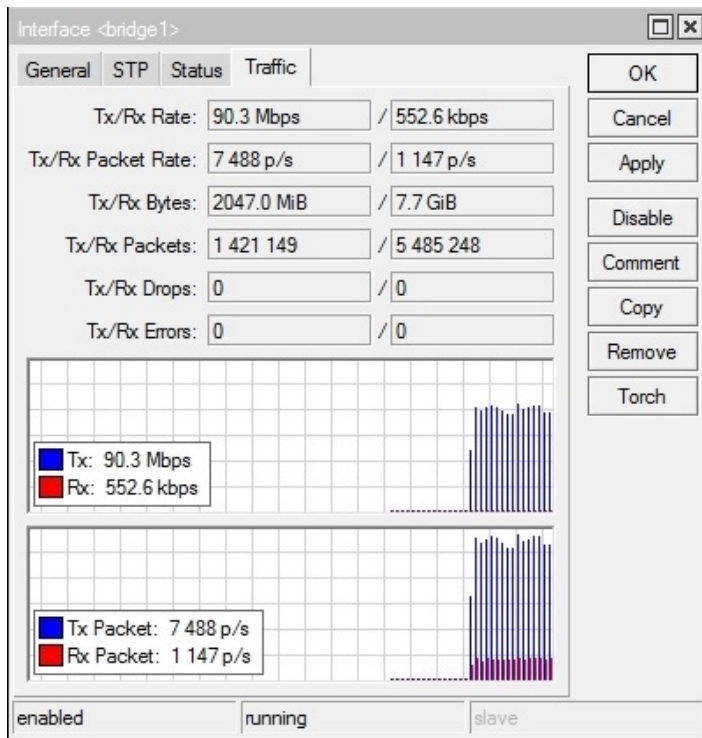
**UDP send - Mikrotik Bandwidth Test**



**Result: 91 Mbit/s i 7400 p/s**

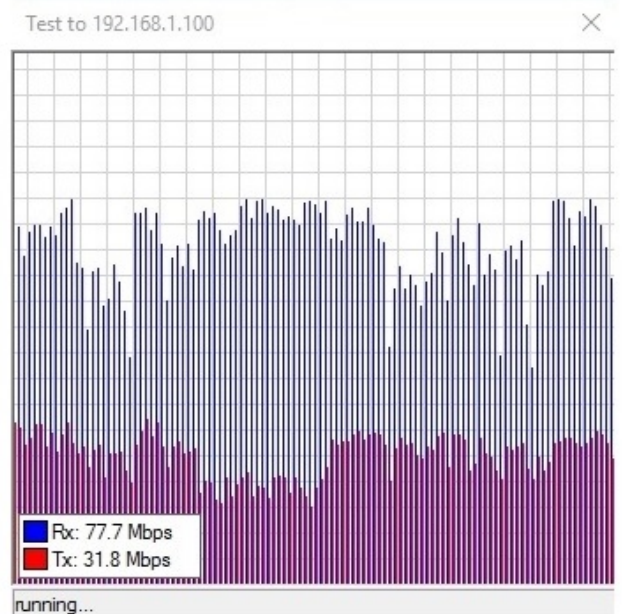
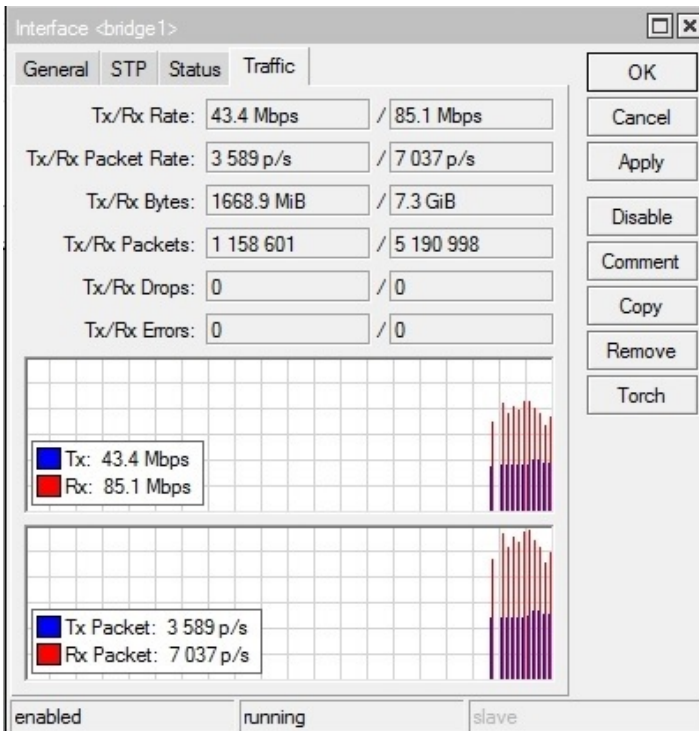


### TCP receive - Mikrotik Bandwidth Test



**Result: 87 Mbit/s i 7500 p/s**

### UDP both - Mikrotik Bandwidth Test

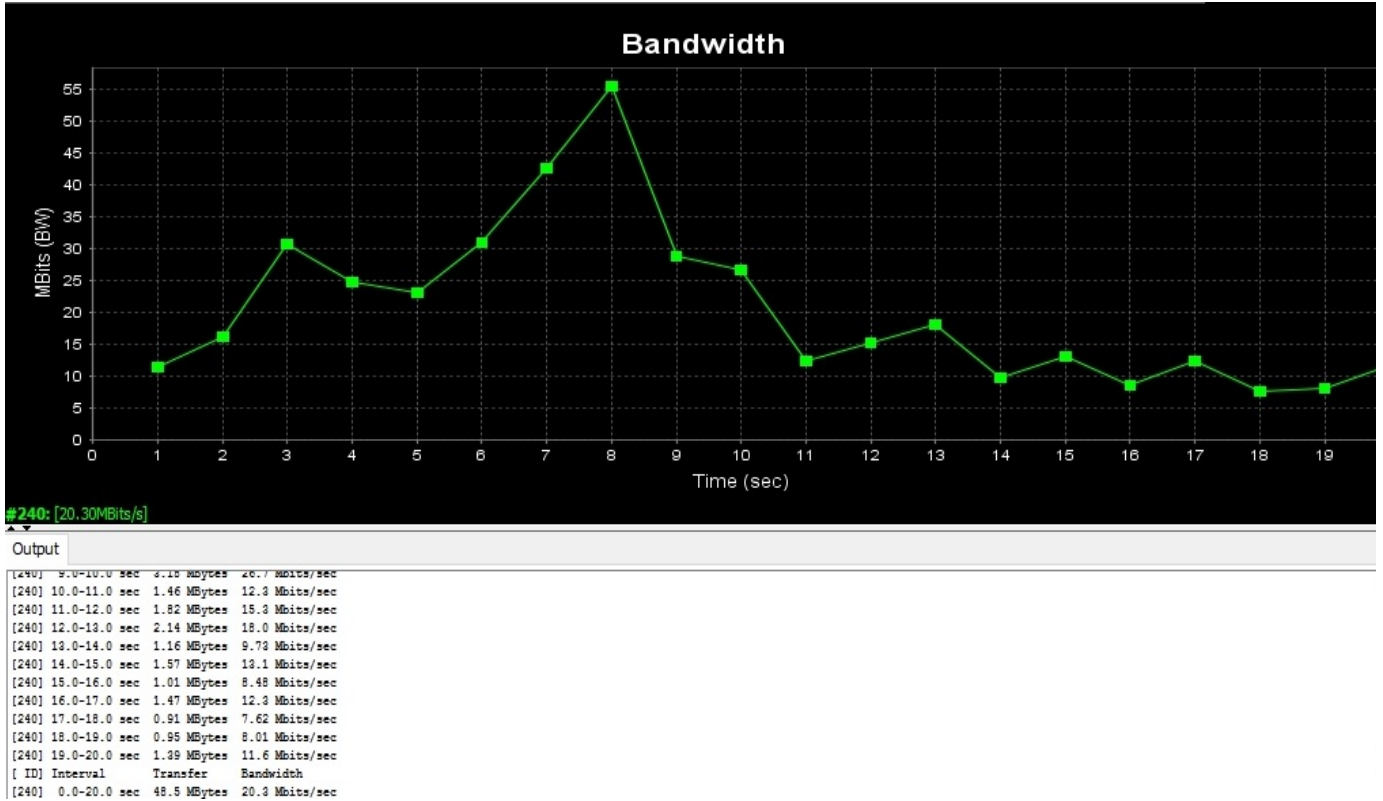


**Result: 109 Mbit/s i 10 600 p/s**



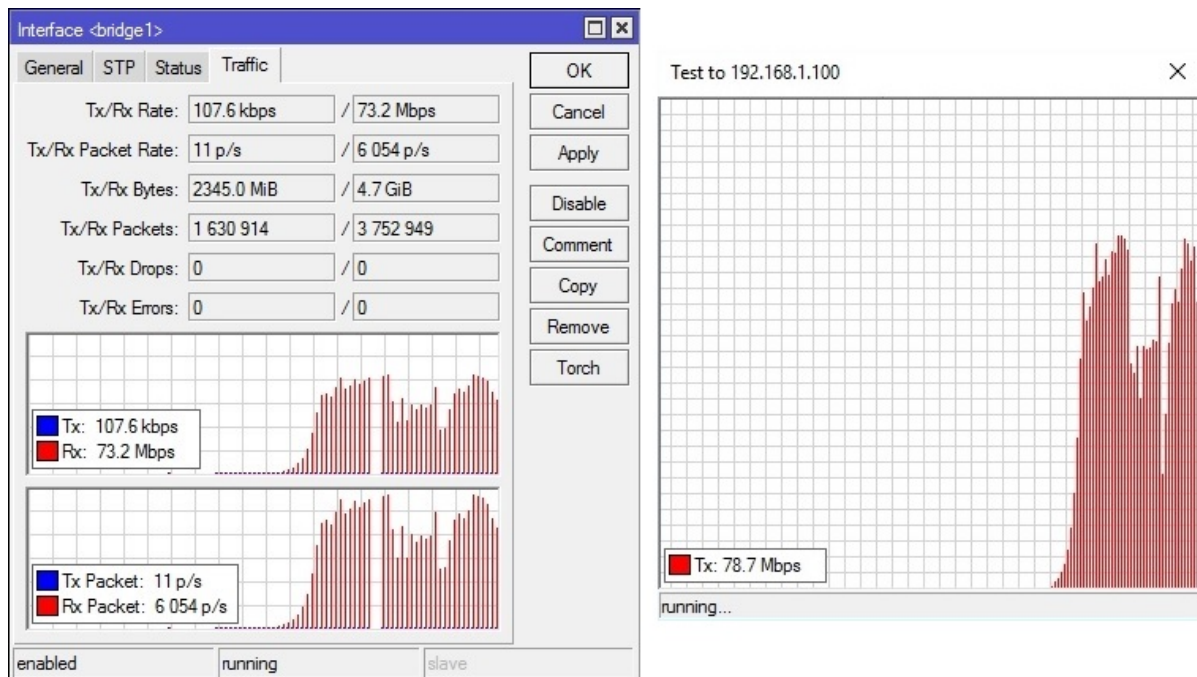
**LB-LINK WR2000**

**UDP - Jperf**



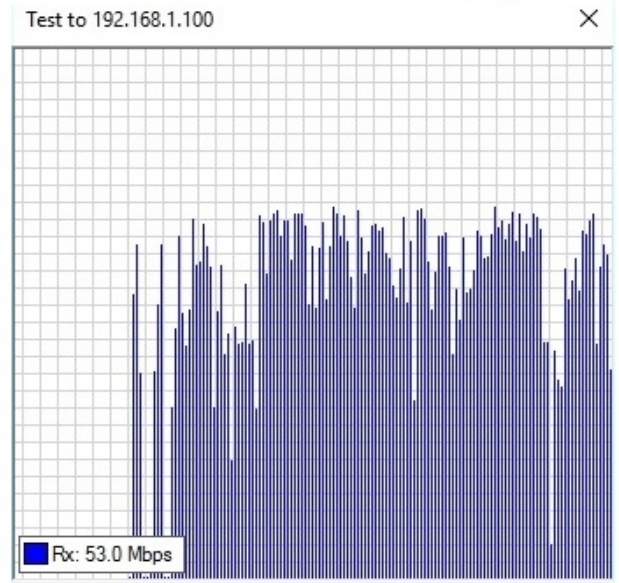
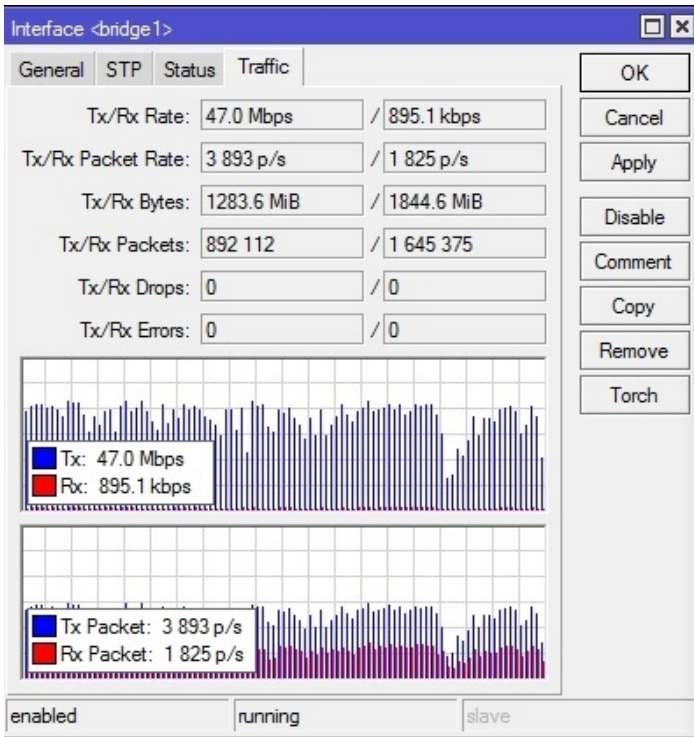
**Result: 21 Mbit/s**

**UDP send - Mikrotik Bandwidth Test**



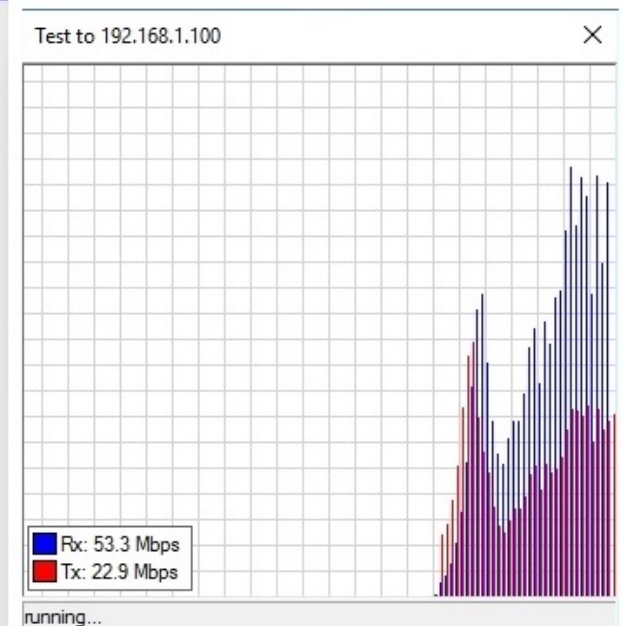
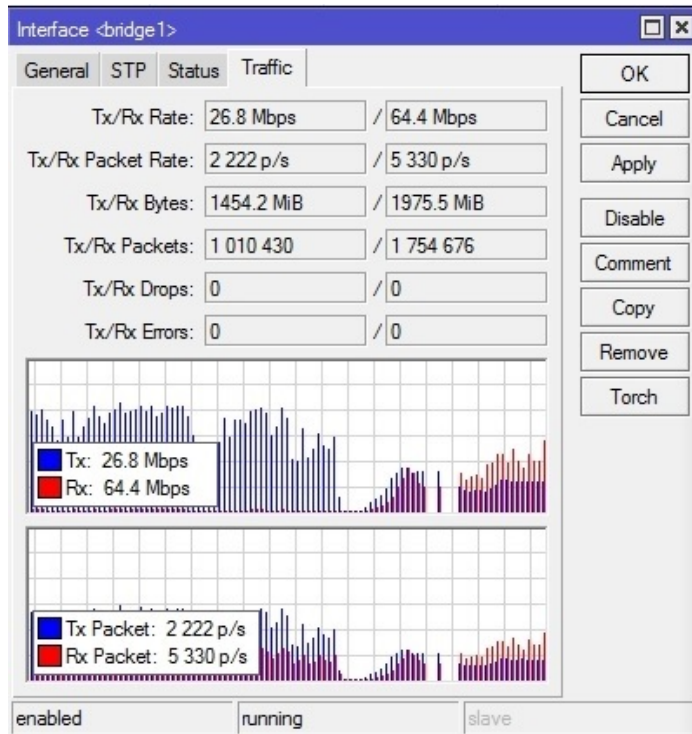
**Result: 78 Mbit/s i 6000 p/s**

### TCP receive - Mikrotik Bandwidth Test



Result: 47 Mbit/s i 3900 p/s

### UDP both - Mikrotik Bandwidth Test



Result: 76 Mbit/s i 7 500 p/s

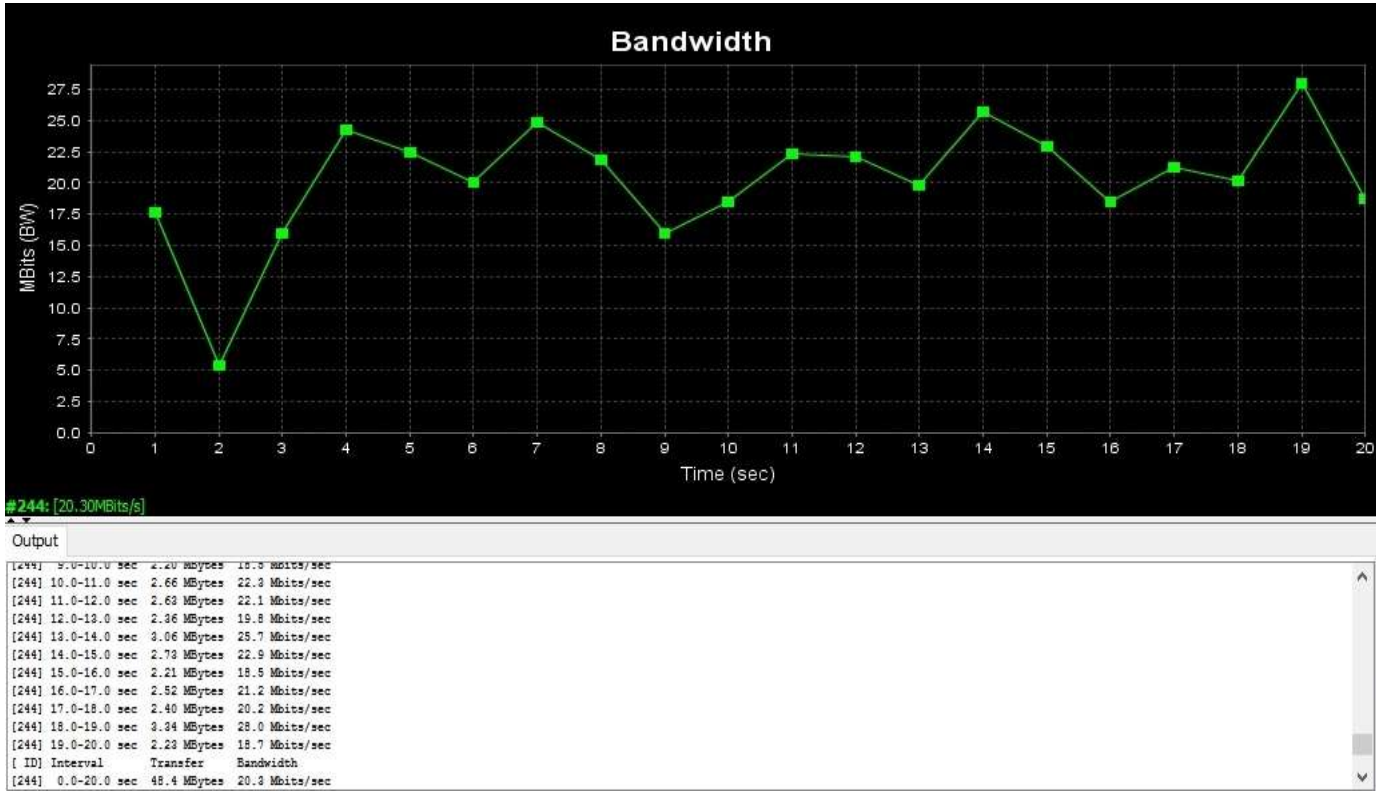




# COMNECT

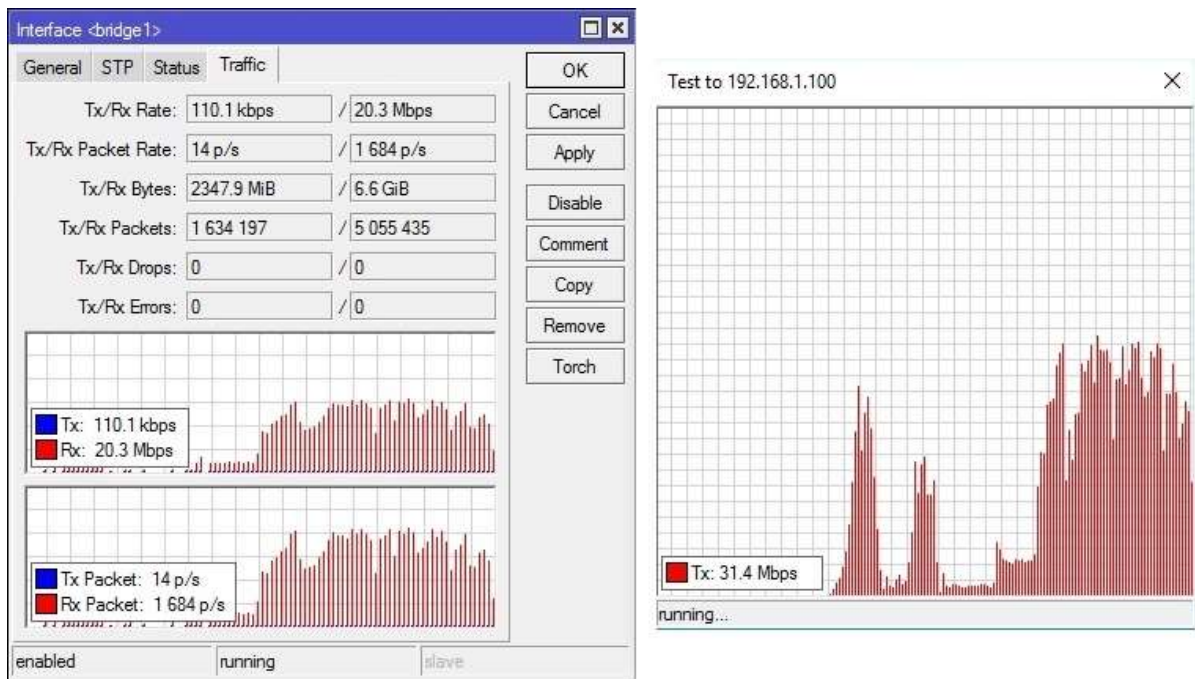
## COMNECT CWR624

### UDP - Jperf



Result: 20 Mbit/s

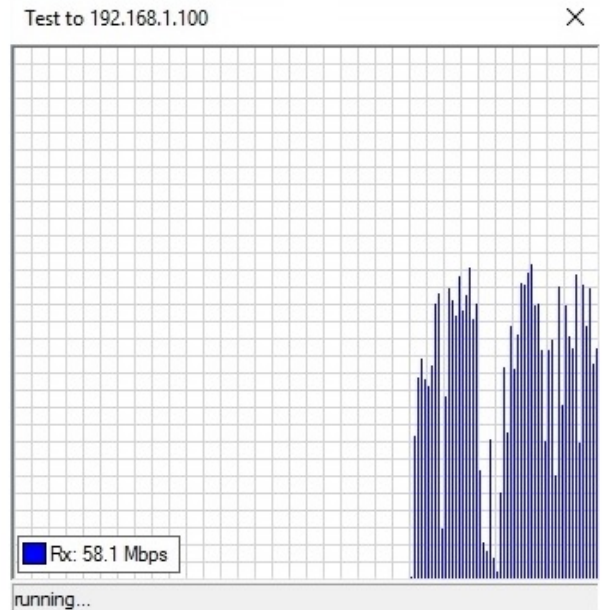
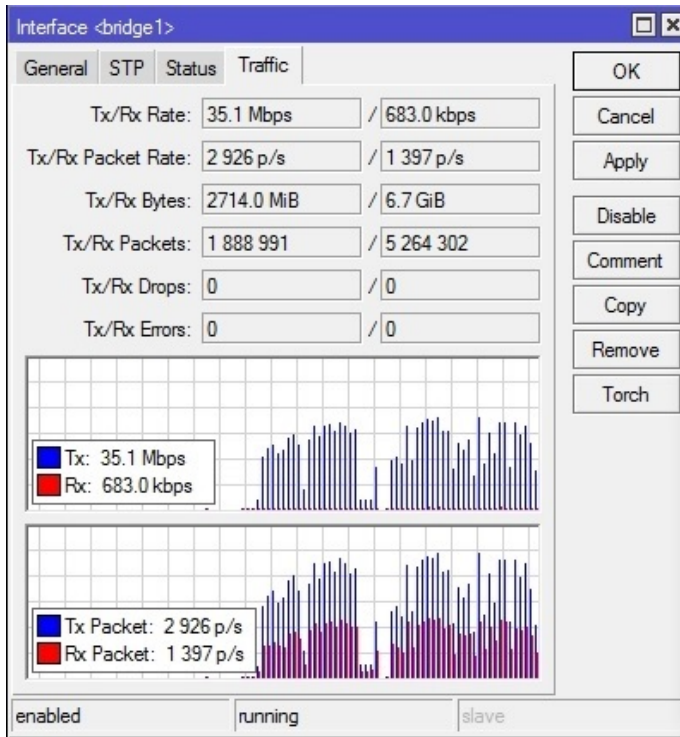
### UDP send - Mikrotik Bandwidth Test



Result: 20 Mbit/s i 1700 p/s

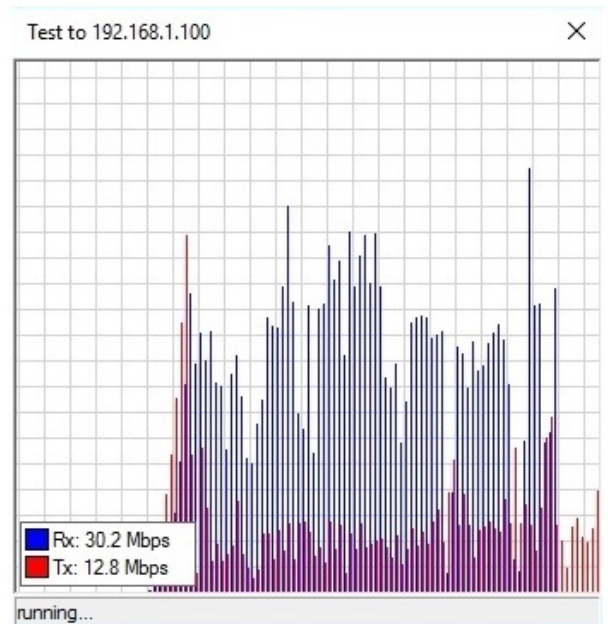
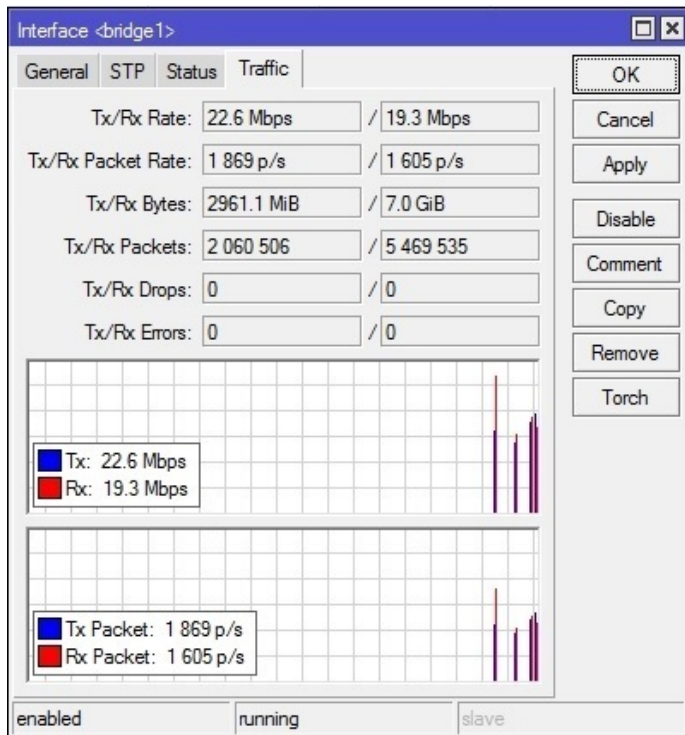


### TCP receive - Mikrotik Bandwidth Test



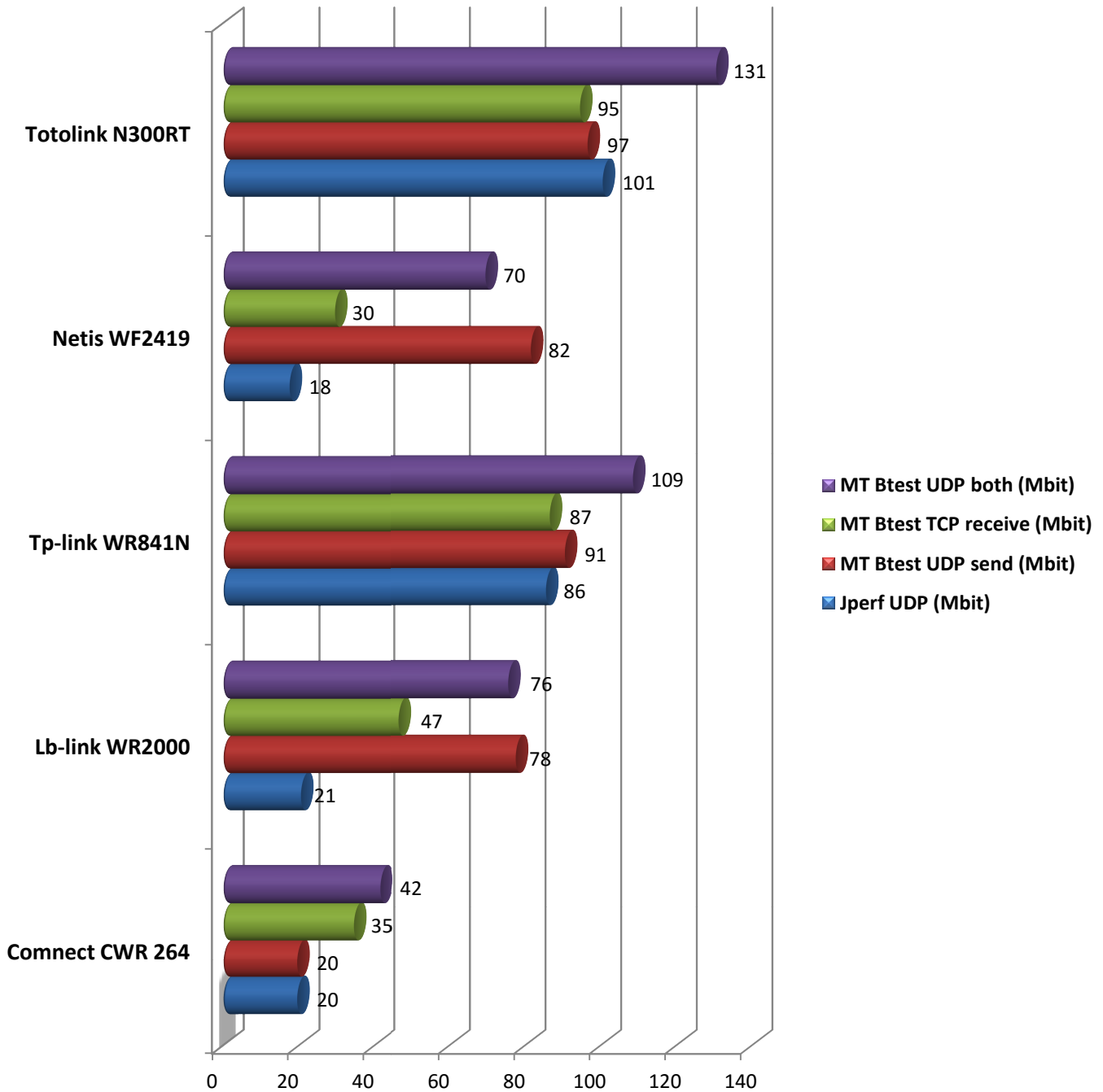
Result: 35 Mbit/s i 2900 p/s

### UDP both - Mikrotik Bandwidth Test



Result: 42 Mbit/s i 3 500 p/s

## The following table show summarizes of bandwidth.



### Summary.

After all tests, the summary is as follows

- price of TOTOLINK N300RT is on the same level as Netis and as you can see on test results – N300RT disqualify rivals in terms of functionality (only TOTOLINK has so many operating modes).
- TOTOLINK N300RT as only one has **36 months of warranty!!** and supports IPV6 protocol
- the most important is fact that TOTOLINKU N300RT (as one) reached throughput above 120Mbit/s.