

# NuStreams- P8



## RESIDENTIAL GATEWAY TESTER

### FEATURES SUMMARY

- Standalone tester for testing Residential Gateway (IP-Sharing) device with up to 7 LAN ports and 1 WAN port.
- Three built-in test modes with pre-defined templates for customization:
  - AT (Auto Test): Testing the DUT's ability to switch traffic between any one of the LAN port and the WAN port
  - ST (Switch Test): Testing the max. throughput of the LAN ports of the DUT
  - PT (Performance Test): Testing the max. throughput between any one of the LAN port and the WAN port of the DUT
- User configurable test parameters: \*
  - Number of LAN ports tested: 2, 4, 5, 6, or 7 ports
  - Packet transmission duration: 1, 2, 3, ..., 8 seconds
  - Packet loss tolerance: 0, 5, 10, 15, 20, 25, 30, ..., 100 packets
  - Excess packets tolerance: 0, 10, 20, 30, 40, 50, ..., 100 packets
  - Packet Length: 64 / 256 / 512 / 1,024 / 1,518 bytes
  - Packet types: UDP or TCP
  - DHCP test: On / Off
- Built-in, non-volatile memory for storing test settings and statistics

\*Subject to test mode selected

### MAJOR BENEFITS

- Optimized and reliable testing – perform deterministic and repeatable tests to validate the functionality and performance of a DUT at various speed and load conditions.
- DHCP server supplies Internet Protocol (IP) addresses when requested by client or DUT on a TCP/IP network that have TCP/IP configured to obtain their IP addresses automatically.
- Cost effective and user friendly
  - Perfect replacement for expensive and complicated PC + multiple network interface cards + third party software solution
  - No special know-how needed for setup, configuration, and operation
  - Easy to maintain
- High test throughput - automatic determination of the pass / fail status of a DUT in between 12 ~ 38 seconds\*\*;
- Compact, lightweight and highly portable

\*\*Subject to test configuration

### KEY APPLICATIONS

- Production and QA/QC tests
- Performance validation
- Trouble shooting at service / maintenance outlets

## NuStreams- P8



## OVERVIEW

## SPECIFICATIONS

Model	NuStreams- P8
Test Ports	LAN: 7 Fast Ethernet Ports with RJ-45 Connectors; WAN: 1 Fast Ethernet Port with RJ-45 Connector
Display	Built-in 4 x 16 characters LCD panel for configuration date and test results display; Built-in 6 LEDs for status indication (Power, Progress, Tx, Rx, Error, GO/NG)
Input Device	Built-in, 8-key keypad (Power Saving, Reset, Set, +, -, PT, ST, AT)
Power	Input: AC 100V ~ 240V, 50Hz ~ 60Hz; Output: DC 9V, 0.8A; Max. Power Consumption: 4.5W
Dimension & Weight	112mm x 157mm x 56mm, 500g
Temperature	Operating: 0°C ~ 40°C, Storage: 0°C ~ 50°C
Humidity	Operating: 0% ~ 85% (non-condensing), Storage: 0% ~ 85% (non-condensing)

**NuStreams-P8** is a standalone tester for testing Residential Gateway (IP-Sharing Devices) with up to 7 LAN ports and 1 WAN port at wire speed. The compact and lightweight design and built-in tests make it an ideal solution for production test on production line and for performance analysis and trouble shooting at service centers or maintenance outlets as well.

With 3 built-in test modes – Auto Test, Switch Test, and Performance Test, **NuStreams-P8** provides pre-defined templates for the customization of test parameters for each test mode including number of ports tested, packet transmission duration, enable/disable of DHCP test, sending UDP/TCP packets, utilization, packet length, etc. No software effort or special technical know-how is needed for test setup.

In Auto Test mode, a DUT's ability to switch traffic is determined by **NuStreams-P8** by comparing the no. of packets transmitted and received between any one of the LAN port and the WAN port tested. Two thresholds, one for packet loss and one for excess packet received, are provided for determining the pass / fail status.

In Switch Test mode, the maximum throughput of the LAN ports of a DUT is determined by gradually increasing the utilization rate of the traffic sent from **NuStreams-P8** to the DUT until there is packet loss.

The maximum throughput between any one of the LAN port and the WAN port of the DUT can be determined in the Performance Test mode of **NuStreams-P8** by gradually increasing the utilization rate of the traffic sent to the tested ports until there is packet loss. In addition, user may select between UDP or TCP packet type for the test and use the DHCP test option to test the DUT's ability in handling DHCP requests.

Built by Xtramus Technologies – an expert in network ASIC design and testing system development and validated with professional network testing systems, **NuStreams-P8** offers highly reliable test results and the best C/P ratio among the solutions available for testing residential gateway.

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