

# NuStreams Window



## Virtual Front Panel for NuStreams-2000/600 Network Testing System

### FEATURES SUMMARY

- Typical NuStreams Window Tests:
  - Throughput, Packet Loss, Illegal Packets, Broadcast Traffic, Address Table Learning, Flow Table Learning, Congestion Testing
- General Main Menu Controls:
  - Transmit Setup (Frame Data, Stream Control Mode, Protocol), Copy / Paste Port Settings, Capture Setup, Media Type Setup (Forced or Nway for Speed and Duplex), MII Setup
- Frame Data Setups:
  - DA/SA: Mask, Mode (Fixed, Increase, Random)
  - DIP/SIP: Mask, Mode (Fixed, Increase, Random)
  - TxUDF for fine tuning the settings of DA/SA, DIP/SIP, VLAN Tag, MPLS Tag, MPLS Tunnel Tag, and User Defined Tag via Mask and Mode (Fixed, Increase, Random),
  - Collision: Back Off (Continuous / Retry Count), Forced Collision, Late Collision
  - Data Pattern: Pre-defined, or User-defined
- Stream Control Mode Setups:
  - Frame Length: Fixed, Increase, Random, Loop
  - Stream Control Mode: Continuous, Single, Burst, Multi-Burst
  - Error Generation: CRC Error, Alignment Error, Dribble Error, IP Checksum Error
  - Inter-Frame Gap: Bit Time, Packet / Second, Utilization
  - Inter-Frame Gap Control: Fixed, Random

### FEATURES SUMMARY

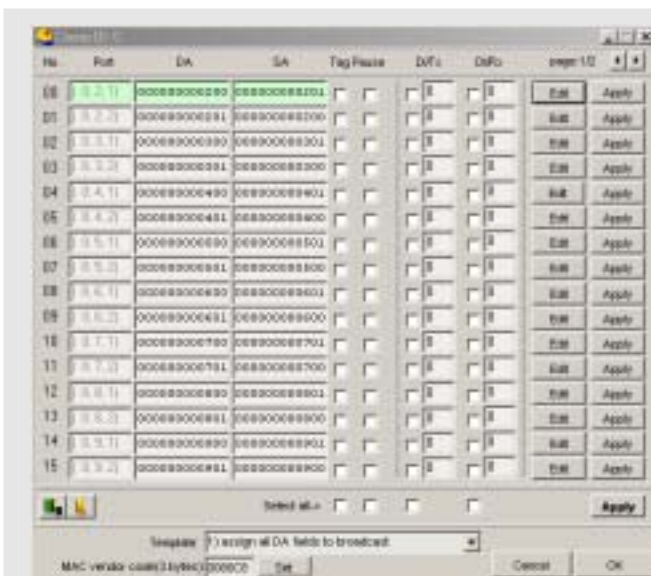
- Protocol:
  - Data Link Layer: Ethernet SNAP, 802.2(IPX), 802.2 (2 bytes), 802.3 Raw
  - Protocol: IPv4, IPv6, IPX, ARP, Pause Control, TCP/IP, OSPF/IP, ICMP/IP, IGMP/IP, UDP/IP
- Copy / Paste of Port Settings:
  - Frame Length Control, Inter-Frame Gap Control, Inter-Burst Control, Stream Mode Control, Padding Setup, Transmit Control, Media Type, DA/SA, DIP/SIP, All
- Capture Setup:
  - 4 Triggers with logical controls
  - Pre-defined patterns: All Packets, IP Checksum Error, Data Integrity Checksum Error, Serial No. Error, CRC Error, Alignment Error, Dribble Error
  - Capture by size\*
  - Mode: Matched, Before, After, After 8\*

\*only for XM-2301/XM02301G modules

### MAJOR BENEFITS

- User friendly and intuitive interface
- Browse Setup Window for easy configuration of DA/SA, Flow Control, and Data Integrity Verification
- X-Trailer for data integrity verification is supported for all test modules and for both Layer 2 and Layer 3 tests.

## Sample Screen Shots



**Browse Setup Window**



**Chassis Virtual Panel**



**MII Setup Window**

# OVERVIEW

## S P E C I F I C A T I O N S

<b>Application Type</b>	Client and/or server application executable on PCs running Microsoft Windows operating systems
<b>Platforms</b>	NuStreams-2000, NuStreams-600
<b>Operating Systems</b>	Microsoft Windows 2000, XP
<b>Chassis Management</b>	Displays and provides control for multiple chassis chains with up to 256 chassis in each chain
<b>Statistics</b>	Multiple views for statistics display, including spread sheet like table
<b>Streams</b>	Manual control of stream parameters such as frame size, data patterns, protocols, and rates
<b>Filters</b>	Manual control of traffic filtering parameters, such as addresses, patterns, errors, and frame sizes
<b>Multi-User</b>	Yes
<b>Protocols*</b>	IPv4, IPv6, IPX, ARP, TCP/IP, ICMP/IP, IGMP/IP, OSPF/IP, UDP/IP

\*More will be supported in newer version of NuStreams Window

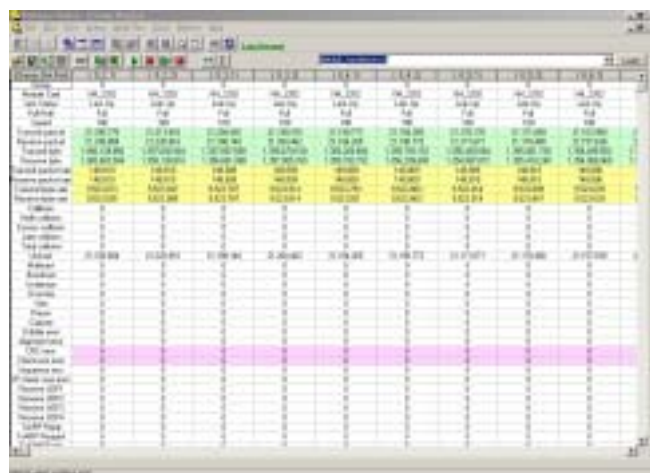
**NuStreams Window** provides a powerful and sophisticated virtual front panel to manage the hardware of NuStreams-2000 and NuStreams-600. Each test port can be independently configured with parameters to define streams, filters, and capture capabilities. In addition, traffic for various network protocols can be customized, transmitted, and received on each port. Comprehensive statistics allow users to perform an in-depth analysis of the performance of the Device Under Test.

**NuStreams Window** provides a flexible and intuitive interface for controlling the test modules in a single or multiple chassis by using a simple click of a mouse button. Any combination of test modules can be put into the chassis of NuStreams-2000 or NuStreams-600 and be automatically identified by **NuStreams Window**.

Each port can be configured to analyze and count packets to match a user-defined criteria, such as source and destination MAC addresses, custom patterns, errors, and frame size ranges.

Each port is equipped with capture memory, which can store packets in real time. A comprehensive set of user-defined triggers and filters is available based on source and/or destination MAC and/or IP addressed, data pattern, and error conditions.

**NuStreams Window** is designed to allow multiple users to independently access individual ports of every test module installed in every chassis. This feature enables users to execute their own tested on the ports assigned to them without disrupting the tests being executed by other users on the system.



**Counter Window**

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