

MetroNID and EtherNID Demarcation Units By...



The EtherNID™ family of packet assurance demarcation units offers service providers, mobile operators and cable MSOs a wide range of demarc solutions for demanding wireless backhaul and business services applications. Offering all common Ethernet interfaces, EtherNIDs can act as wire-speed media converters while supporting the full functionality of the ESAP™ Ethernet Service Assurance Platform, including in-service, active and passive performance testing, intelligent layer 1-4 loopback, Ethernet service creation and SLA validation.

Based on the Fast-Thru™ pure-hardware data-path architecture, EtherNIDs are ideal for demarcation and monitoring of critical real-time, transactional and 4G / WiMAX / LTE wireless backhaul applications. EtherNIDs provide microsecond measurement resolution for one-way latency and jitter, in-service RFC-2544 throughput testing, traffic statistics and monitoring of up to 100 flows or SLAs – all while traffic flows transparently through the unit. It's a one-stop SLA solution, with EVC service creation functionality assured by the industry's only in-line SLA-Meter™.

ESAP Service Creation & Assurance Functionality

Service Assurance Functionality:

PAA™ & SLA-Meter™ High-precision, hardware assisted, latency + jitter-free demarcation, monitoring and measurement of latency, jitter, frame loss and continuity, including 1-way performance validation with microsecond resolution. Multi-flow, multi-service, multi-site performance assurance enables real-time SLA assurance over any network. Supports point-to-point, multipoint & mesh topologies, unicast & multicast testing.

In-Service Throughput Testing Verify the throughput of EVCs in-service, without affecting customer traffic. EtherNID™ & MetroNID™ units generate & analyze traffic flows up to full wire-speed at both layer 2 & 3.

RFC-2544 Automated Test Suite & Reports Advanced tool based on the RFC-2544 standard that can be used to measure and diagnose throughput, delay, jitter (delay variation), frame loss, and back to back efficiency.

Intelligent loopbacks In-service layer 1-2-3-4 loopbacks per-flow, defined by VLAN, Service-Level, MAC / IP addresses or any combination of layer 2-4 header criteria. Units respond to in-band loop-up commands from most third-party Ethernet test sets and monitoring systems, as well as via Y.1731 standards.

Per-Flow Statistics Real-time statistics of live traffic at layer 1-2-3-4 (per VLAN, Ethertype, ToS, CoS, MAC, IP, etc.).

Tapping & Monitoring Single or dual monitor ports providing filtered, real-time access to unidirectional or bidirectional traffic.



Service Creation & Traffic Conditioning

Service Mapping Create E-Line, E-LAN & E-Tree services directly at the demarc point - service mapping applies C/V-LAN tags (selective push) and/or configurable service class to traffic meeting detailed layer 2,3 & 4 criteria.

Bandwidth Policing Limit upstream and downstream CIR/EIR by filtering criteria or for all traffic. Facilitates Carrier Ethernet service provisioning and on-demand/incremental service upgrades. Allows commissioning of MEF-compliant services.

Zero-Latency Traffic Shaping Pre-conditioning of traffic to accelerate services and optimize access link bandwidth use. Passes highest-priority traffic Fast-Thru™ without added delay or jitter while other traffic is buffered until capacity is available.

Wirespeed Filtering

Filter wirespeed traffic at layer 1-2-3-4 (L2CP, BDPU, per VLAN, Ethertype, Protocol type, MAC, IP, User Defined).

Switch-Free Aggregation Latency-free, multi-port aggregation from 4 Fast Ethernet ports to a single GbE, or from 2 GbE's to a single GbE or protected pair (total traffic < 1 GbE). De-aggregate by VLAN, or any combination of Layer 2 - 4 frame criteria.

General Functionality:

Jumbo Frames support All functions supports Jumbo Frames up to 10,240 bytes at all rates (10/100/1000 Mbps).

3-Way Redundant Power Units can be powered using 5VDC, or dual -48V feeds, all mutually redundant.

Plug & Go™ Full automated customer-level install, auto-configuration & inventory tracking capabilities.

SNMP v1 & v2c: Support SNMP v1 and v2c for monitoring, alarms, OSS integration and unit configuration.

For more information regarding the specifications of the Accedian Networks product line as well as network integration design, please contact Cobian Engineering & Technical Consultants via email at info@cobiangroup.com or visit www.cobiangroup.com

