



SGA-NEDD

FPGA based High throughput early warning DDoS detection engine

OVERVIEW

AITIA SGA-NEDD DDoS detector engine is designed to detect flood-based DDoS attacks in milliseconds. The SGA-NEDD contains a customizable container module which is populated with fully parallelized heuristic, behavioral DDoS detector units, which can detect more than 97% of all DDoS attacks. The detector can be used with various line rates (10Gbps/40Gbps/100Gbps). The detector parses incoming packets, maintains traffic statistics for each point in the system, and uses this data to detect attacks with high precision. SGA-NEDD can be purchased as an IP core or with a custom Kintex 7 10GbE PCIe card.

Essentials:

- Only protocol metadata is used for detection
- Can process up-to 300 Mega-packet per second
- Can detect DDoS attacks in less than 1ms
- Less than 0.01% false detection chance
- Customizable add-on based architecture

THE IP CORE CONTAINS:

- 1/10/40/100 GbE PCS/PMA+MAC module
- PCIe DMA engines and Linux, Windows drivers
- Packet parser engine
- Quick look-up table
- Fully -customizable, -extendable detector container
- 16 different DDoS detection units, which can detect 97% of all DDoS attacks



APPLICATIONS

- Datacenters
- Internet service providers
- Internet exchanges
- Availability critical networks
- Mobile providers