# **Ethernet Packet Generators**

Designed to meet the needs of "Ethernet Everywhere" and the infrastructure behind the Internet of Things, the Axtrinet<sup>™</sup> APG

Ethernet Packet Generators provides compact and affordable 40Gbps and 10Gbps Ethernet Packet Generator/Analysers with a simple to use Graphical User Interface and an open TCL API for third party scripting.

Ideally suited to applications in R&D, Test and Manufacturing environments the Axtrinet APG Ethernet Packet Generators allow reliable and affordable development and testing of:

- Ethernet network equipment such as switches, routers, firewalls and network monitoring devices
- Specialist devices such as FPGA accelerator NIC cards and offload appliances
- Ethernet infrastructure installations encompassing cabling and switches

Don't risk shipping untested equipment; use the  $Axtrinet^{TM}$  APG Ethernet Packet Generators to verify correct operation of new products in the development environment and at the factory.



- Highly configurable Ethernet Packet Generation
- Full wire-speed operation
- Industry standard SFP+ and QSFP+ ports
- Real-time packet counts and error detection
- Packet Capture for post-test analysis
- Simple to use Graphical User Interface for configuration and control
- Clear LED status indication for Go/No-Go testing
- USB 2.0 port for easy set up and local management and 10/100Mbps Ethernet LAN connection for flexible remote management

## **Benefits**

 Low cost allows multiple units to be deployed in a development environment – one per desk

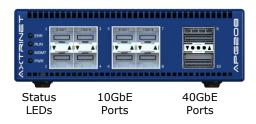
- Easy to set up and use, avoids the need for complex vendor specific programming skills
- Ideal for integration into a manufacturing test environment
- Flexible choices of interfaces allows use with different speeds and media types, maximising the investment across multiple projects
- Small size, 1U high (44mm) and 146mm wide, for desk-top or rack shelf mounting (1/3 of 19" rack width)

## **Applications**

- Ideal for use by Development and Test engineers requiring a low cost 40Gbps or 10Gbps Ethernet data source and capture
- Suitable for R&D laboratory environment or deployment at a manufacturing site as part of a production test solution
- Compact and easy-to-use for Sales and Field Application Engineers to demonstrate or debug complex Ethernet equipment at customer sites



#### **APG208 Front View**



#### **Transceivers**

- 40GbE QSFP+ & Direct Attach
- 10GbE SFP+ & Direct Attach

#### **Transmit Control**

#### **Ports**

- Full wire-speed 40Gbps and 10Gbps ports
- 8x user configurable independent streams per port
- Packet transmit rate control up to 100%
- Transmit burst control (single, burst, continuous)

## **User Configurable Packet Headers**

- Up to 10 stacked headers per port
- Configurable fields with auto-increment / decrement and fixed
- Variable length tag field
- Variable length stateless header

# **User Configurable Payload**

- Fixed / incrementing / random payload
- User configurable 64 byte -16K byte packet length
- Optional timestamp, sequence number and packet signature

# **Real-Time Statistics (per Port)**

- Transmit Packets, Bytes, Rate
- Receive Packets, Bytes, Rate
- · Receive CRC Errors, Rate
- Fragments, Undersize, Byte Ranges
- User configurable counters

#### **Packet Capture**

- Wire-speed packet capture (up to 1GByte) from any port
- 4x User definable filters per port

#### **Indicators**

- Unit Power / Status
- · Management Activity
- Port Link Status / Activity
- Test Run Status
- Test Error Status

## **Contact Information:**

Xentech Solutions Limited 6, Stanta Business Centre St Albans, AL3 6PF, UK Tel: +44 1727 867795

Email: enquiries@axtrinet.com

## **APG Rear View**



USB & 10/100Base-T Management Ports

Fan Sync 12Vdc Port @ 5A

# **Management Interfaces**

- 10/100Base-T Ethernet
- Full Speed USB 2.0

## **Device Management**

- Management Console
- Graphical User Interface Application
- TCL Scripting API

## **Physical**

- 1/3 19" rack width x 1U
- 140 mm (W) x 228 mm (D) x 44 mm (H)
- 5.51" (W) x 8.97" (D) x 1.73" (H)
- 1.20 kg (2.65 lb)

#### **Environmental**

- Operating Temperature: 0°C to 40°C
- Storage Temperature: -20°C to 55°C
- Humidity: 5% to 90% non-condensing

## **Power**

• Input Voltage: 12VDC @ 5.0A

Power: 60W (max)

## Regulatory

- CE (Europe)
- FCC (US)

# **Support**

- Hardware warranty
- · Software updates
- Technical support

## In the box

- Axtrinet APG Ethernet Packet Generator
- Universal plug-top PSU
- USB cable
- · Quick Start Guide

## **Ordering Information:**

**APG4** 4x 10GbE SFP+ cages\* **APG8** 8x 10GbE SFP+ cages\* **APG200** 2x 40GbE QSFP+ cages\*

APG208 2x 40GbE QSFP + 8x 10GbE SFP+ cages\*

\* Transceivers not included

All specifications subject to change without notice

Axtrinet™ is a Trading name and registered Trademark of Xentech Solutions Limited

www.axtrinet.com