Ultra High Speed Packet Processing
For Advanced Network Monitoring

Series 4000 HyperEngine Packet Processor

APCON’s Series 4000 HyperEngine Packet Processor offers superior, industry-leading processing power for future network growth.

APCON’s hybrid network visibility platform significantly increases efficiency and visibility of network security, analytics and performance monitoring solutions. The Series 4000 HyperEngine enables real-time packet processing and delivers streamlined packet traffic to existing network monitoring and security tools.

KEY BENEFITS

Future-Ready
The Series 4000, with the HyperEngine, is the solution for ultra-high-speed networks that can handle new data-intensive applications for enterprises.
• Real-time packet traffic processing across multiple 1G/10G/25G/40G/100G feeds

Scalability
Designed for scalability and performance for investment protection as organizations expand operations.
• High performance processing capacity up to 600Gbps
• Up to six configurable service engines

Complete Visibility
A full suite of advanced features enables end-to-end hybrid visibility.
• Duplicate packet removal
• NetFlow generation
• GRE Tunnel Initiation*
• Deep Packet Inspection*
• Advanced Packet Slicing*
• GTP Correlation*
PROCESSING FEATURES

**Deduplication**
Removing duplicate packets improves monitoring tool efficiency, accuracy, and recording space requirements.

HyperEngine, with up to 600Gbps processing capability, can effectively monitor every packet in the high-speed data stream to remove duplicates and improve tool efficiency. It also enables duplicate matching across layers 2, 3 and 4 headers, and supports a large, configurable window size of up to 500ms.

**Deep Packet Inspection***
The HyperEngine's Deep Packet Inspection feature enables data privacy and compliance for regulations such as HIPAA and PCI by identifying and masking sensitive data. It looks inside the data packet and searches for specific data patterns, such as social security numbers or credit card numbers. Once identified, the matched data can be masked and the packet forwarded, or the packet can be dropped or forwarded unchanged.

It can also search for known virus threats, and forward any identified packets directly to a security tool.

**GRE Tunnel Initiation***
The HyperEngine provides GRE tunnel initiation with the ability to receive incoming traffic flows, encapsulate each packet and redirect the traffic to another destination.

When combined with APCON's IntellaTap-VM and TitanXR, it provides a unified virtual and physical monitoring solution that provides complete hybrid network visibility and improves monitoring and security tools efficiency.

**Advanced Packet Slicing***
The packet slicing feature, with user-specific packet slice length, removes packet payload that is not necessary for certain network performance analysis and analytics tools, thus increasing the efficiency and effectiveness of these tools. It also ensures data privacy for compliance to regulations such as HIPAA and PCI.

**Offload NetFlow Generation Burden**
The HyperEngine offloads processing from routers and other production equipment to increase efficiency and save costs. Connect any system traffic up to the six service engines for NetFlow source processing of unsampled or sampled traffic flow records.

**GTP Correlation***
To better support service provider networks, the HyperEngine offers new GPRS Tunneling Protocol (GTP) correlation capability that provides subscriber-specific packet data visibility for performance monitoring, analytics and security tools.
<table>
<thead>
<tr>
<th>Feature</th>
<th>Specifications</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Performance</strong></td>
<td>6 service engines; total up to 600Gbps†</td>
</tr>
<tr>
<td><strong>Memory</strong></td>
<td>64GB of DDR4 per service engine</td>
</tr>
<tr>
<td><strong>Deduplication</strong></td>
<td>ACI-9330-002</td>
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<tr>
<td><strong>NetFlow Generation</strong></td>
<td>ACI-9330-004</td>
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<td><strong>Deep Packet Inspection</strong></td>
<td>ACI-9330-006</td>
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<td><strong>GRE Tunnel Initiation</strong></td>
<td>ACI-9330-008</td>
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<tr>
<td><strong>Advance Protocol Stripping</strong></td>
<td>ACI-9330-010</td>
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<tr>
<td><strong>GTP Correlation</strong></td>
<td>ACI-9330-012</td>
</tr>
<tr>
<td><strong>Weight</strong></td>
<td>13 lbs (5.9 Kg)‡</td>
</tr>
<tr>
<td><strong>Power</strong></td>
<td>750-900 Watts / 2560-3072 BTU‡</td>
</tr>
<tr>
<td><strong>Size</strong></td>
<td>17.24” W × 17.46” D × 1.63” H (43.78 W × 44.32 D× 4.11 H cm)</td>
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<tr>
<td><strong>Operating Temp</strong></td>
<td>32 to 113 °F (0 to 45 °C)</td>
</tr>
<tr>
<td><strong>Storage Temp</strong></td>
<td>-40 to 158 °F (-40 to 70 °C)</td>
</tr>
<tr>
<td><strong>Relative Humidity</strong></td>
<td>Operating: 10-85%; Storage: 0-95% noncondensing</td>
</tr>
<tr>
<td><strong>Safety</strong></td>
<td>TBD</td>
</tr>
<tr>
<td><strong>EMC</strong></td>
<td>TBD</td>
</tr>
<tr>
<td><strong>Compliance</strong></td>
<td>TBD</td>
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</tbody>
</table>

* Planned for future release and subject to change.
† Performance indicates the network processor capacity. Actual performance varies by the selected feature and packet size.
‡ Weight and power estimates are preliminary and subject to change.
COMPLETE HYBRID NETWORK VISIBILITY

HyperEngine is part of APCON’s Series 4000 network visibility solution, and is compatible with all systems from 3RU to 9RU.

APCON Solutions
APCON leverages its proprietary IP and deep expertise to provide flexible, focused solutions across

- Government
- Healthcare
- Higher Education
- Financial Services
- Manufacturing
- Telecommunications

APCON solutions provide the flexibility and means to gain visibility to their data more efficiently, resulting in savings across the board, including time, resources and maintenance.

Service and Support
APCON’s professional services team of certified engineers have years of experience optimizing network visibility strategies for businesses across the globe. In addition to providing installation assistance of existing analysis tools, this team proudly provides around the clock troubleshooting services and support.

About APCON
A privately held corporation, APCON is headquartered near Portland, Oregon, where it has operated since 1993. APCON's in-house staff manages product design and development, manufacturing, quality assurance and final testing, customer training and long-term servicing of its solutions – whether for a system with a single switch or a global installation that spans across multiple geographical or cloud locations.