BROCHURE
High-Speed Ethernet
Product Portfolio
400, 200, 100, 50, 40, 25, 10, 5, 2.5GbE
Ethernet speeds are increasing. Networks are becoming more intelligent. Topologies are scaling to sizes never seen before. Spirent understands this growth. We support a variety of speeds and protocols so you can test under realistic conditions. We support unparalleled port and application scale so you can verify your products and services under expected loads. The Spirent products featured in this brochure are designed to support 400, 200, 100, 50, 40, 25, 10, 5, 2.5GbE on a single port.

In today’s environment delivering a high quality user experience is more important than ever. A reputation for reliability can create a competitive advantage for new offerings. Maintaining both can be challenging as the number of devices on the network proliferates and the bandwidth they consume skyrockets. Testing your user experience, reliability and quality allows you to confidently launch new services dependent on higher speed links using Spirent’s series of Quint-speed 100/50/40/25/10GbE industry-leading 5 speeds in a single module and latest 400/200/100/50GbE series of modules. Spirent has always been a leader in validating exactly these high density, high scale and high quality solutions.

**Spirent Gives You:**

- High FLEXIBILITY with support for more interfaces and protocols across several new quint-speed MX3, PX3, FX3 and DX3 series modules
- Ultra SPEED 400/200GbE, first to market, highest density multi-speed test modules
- Extreme SCALABILITY with 144x100GbE, 288x50GbE and 576x25GbE ports in one chassis—the industry’s highest density available (DX3 and PX3 series modules)
- LOWEST COST OF OWNERSHIP PER PORT
### Flexibility

**DX3**

- Data Density

### PX3

**System Validation**

### FX3

**Functional Depth**

### MX3

**Multiplay Scale**

- High speed/performance 50GbE, 100GbE, 200GbE, 400GbE multi-speed modules
- Full set of 10GbE, 25GbE, 40GbE, 50GbE and 100GbE speeds on one module
- Support for ALL key form factors, CXP, CPAK, CFP, CFP2, CFP4, CFP8, OSFP, QSFP28, QSFP56, and QSFP-DD
- Support for RS-FEC and Auto-Negotiation/Link Training, mandatory IEEE requirements for testing
- Clause 74 BASE-R FEC, Clause 91 RS-FEC, and Clause 108 RS-FEC, Clause 119 RS-FEC, Clause 134 RS-FEC
- SR, LR optical transceivers, AOC and CR copper/breakout options
- Support for all key copper and optical interfaces across all form factors
- Support for key 25G form factor SFP28 available on 8 port (MX3-25GD-S8, MX3-25GO-S8 and FX3-25GD-S8, FX3-25G-S8)

### Scalability

- Spirent’s Cloud Core Architecture ensures the system can simultaneously achieve high scale for multiple protocols - emulating tens of thousands of unique routers and simulated users at the same time
- Demonstrated 25.6 terabits of cloud traffic per second in industry’s largest 100GbE test. View report: [www.spirent.com/About-Us/testedwithspirent](http://www.spirent.com/About-Us/testedwithspirent)
- Emulate 13,000 BGP routers advertising 10M routes and generating line rate traffic
- Maintain 1,200 BFD sessions per port involving multiple protocols with 50 millisecond updates per session
- Emulate and churn 64,000 PPPoE clients per port saturating the network with 100Gbps of simulated traffic

### Density

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>DX3-400GQ-T2</td>
<td>Highest 400/200/100/50GbE industry leading density supporting CFP8 and QSFP-DD form factors</td>
</tr>
<tr>
<td>DX3-100GQ-T12</td>
<td>Highest 100/50/40/25/10GbE density using the 12-port QSFP28 DX3 and PX3 series modules. When the 12-port 100GbE load module is combined with the power of the Spirent N12U chassis, it offers 144x100GbE ports and up to 576x25GbE ports for industry leading density</td>
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### Platform for the Future

- 400GE and 1TE ready
- Integrated high-precision timing between ports, modules and chassis without need for separate timing device
- Any module in any slot—no chassis slot restrictions
- Built-in 1588v2 support
- Lower TCO and lower downtime with Power Save mode and fast firmware upgrades
Ordering Information

<table>
<thead>
<tr>
<th>Load Modules Supported</th>
<th>Load Modules Supported (cont’d)</th>
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<tbody>
<tr>
<td>2-Port 100Gbe QSFP28 (100Gbe only)</td>
<td>8-Port 100Gbe QSFP28 (100Gbe only)</td>
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<tr>
<td>2-Port 100Gbe QSFP28 (100/25Gbe)</td>
<td>8-Port 100Gbe QSFP28 (100/25Gbe)</td>
</tr>
<tr>
<td>2-Port 100Gbe QSFP28 (100/50/25Gbe)</td>
<td>4-port 100Gbe QSFP28 (100Gbe only)</td>
</tr>
<tr>
<td>2-Port 100Gbe QSFP28 (100/100Gbe)</td>
<td>4-port 100Gbe QSFP28 (100Gbe only)</td>
</tr>
<tr>
<td>2-Port 25Gbe QSFP28 (25/10Gbe)</td>
<td>4-port 100Gbe CFP2 (100Gbe operation only)</td>
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<tr>
<td>4-port 100Gbe QSFP28 (100Gbe only)</td>
<td>4-port 100Gbe CFP2 (tri-speed module)</td>
</tr>
<tr>
<td>4-port 100Gbe QSFP28 (100/25Gbe)</td>
<td>16-Port 100Gbe Copper (10/5/2.5/1Gbe/100M)</td>
</tr>
<tr>
<td>4-port 100Gbe QSFP28 (100/40Gbe)</td>
<td>16-Port 50Gbe Copper (5/2.5Gbe)</td>
</tr>
<tr>
<td>4-port 100Gbe QSFP28 (100/50/25Gbe)</td>
<td>16-Port 2.5Gbe Copper (2.5Gbe only)</td>
</tr>
</tbody>
</table>

Appliances Supported

4-Port 400Gbe QSFP-DD (400/200/100/50Gbe) PX3-QSFP-DD-4-750A
4-Port 400Gbe QSFP-DD (400/50Gbe) PX3-QSFP-DD-4-400A
8-Port 400Gbe QSFP-DD (800/200/100/50Gbe) PX3-QSFP-DD-8-750A
8-Port 400Gbe QSFP-DD (800/200/100/50Gbe) PX3-QSFP-DD-8-550A
8-Port 400Gbe QSFP-DD (800/200/100Gbe) PX3-QSFP-DD-8-550A
8-Port 400Gbe QSFP-DD (800/200/100/50Gbe) PX3-QSFP-DD-8-350A
8-Port 400Gbe QSFP-DD (800/200/100Gbe) PX3-QSFP-DD-8-350A
8-Port 400Gbe QSFP-DD (800/200/100Gbe) PX3-QSFP-DD-8-350A

Accessories

Copper DAC QSFP28 100 GBASE-CR4 1M ACC-1034A
Copper DAC QSFP28 100 GBASE-CR4 3M ACC-1035A
Active optical cable QSFP28 100GBASE-SR4 5M ACC-1036A
Optical Transceiver QSFP28 100GBASE-SR4 MMF 850NM ACC-6095A
Optical Transceiver QSFP28 100GBASE-LR4 SMF 1310NM ACC-6096A
Optical Transceiver CF4 100GBASE-SR4 ACC-6097A
Optical Transceiver CF4 100GBASE-LR4 ACC-6098A
Active optical cable CF4 100GBASE-SR4 ACC-1037A
Adapter CF2 to CF4 ACC-6091A
Adapter CF2 to QSFP2 ACC-6094A
Adapter CF2 to QSFP DD ACC-6015
SR10 CF2 to CFP2 adapter - order direct from Cisco CVR-CFP2-CPA10
SR10 CF2 to CFP2 adapter - order direct from Cisco CVR-CFP2-CPA4
SR10 Transceiver - order direct from Cisco CPAK-100G-SR10
LR4 Transceiver - order direct fromCisco CPAK-100G-LR4
Cable 2 X 40G MPO Breakout (DX2-100G-P4 Only) ACC-1025
Cable 8 X 10G MPO-IL Fanout (DX2-100G-P4 Only) ACC-1026
Optical Transceiver 100GBASE-LR4 CF4 1310NM SMF ACC-6083A
Optical Transceiver 100GBASE-SR4 CF4 1310NM MMF ACC-6084A
Optical Transceiver CFP 100GBASE-LR10 155MM SMF ACC-6067A

Spirent Chassis

Spirent T12U chassis & controller w/ 110V AC power supply SPT-T12U-110
Spirent T12U chassis & controller w/ 220V AC power supply SPT-T12U-220
Spirent N4U Chassis & controller w/ 110V AC power supply SPT-N4U-110
Spirent N4U Chassis & controller w/ 220V AC power supply SPT-N4U-220