Spirent **C50-100G Appliance**

Spirent TestCenter on C50 Appliance

The Spirent C50 appliance with 100/50/40/25/10G Ethernet multi-speed performance test ports delivers the best total cost of ownership in its class. Spirent TestCenter's Layer 2–3 traffic generation and analysis is combined with powerful network emulation and application traffic to deliver the perfect blend of realism, scalability and performance required to test today's networks.

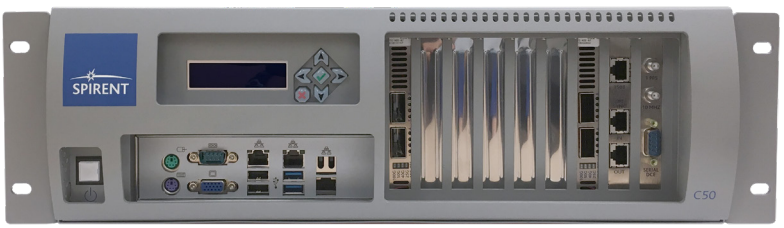
Features & Benefits

- Multi Speed 100/50/40/25/10G ports for flexible interconnect options including Long Reach, Short Reach, DAC and 1000BASE-T
- Traffic and protocol performance identical to dX3 mainframe test modules (100/50/40/25/10G) and fully interoperable with all Spirent TestCenter hardware
- Full chassis chaining and external timing synch available via direct connect, NTP, PTP, GPS, and CDMA
- Full suite of Spirent TestCenter protocols and test packages are available
- 4-port 100/50/40/25/10G configurations available

The Spirent C50 Multispeed Performance 100/50/40/25/10G appliance combines Spirent's industry-leading Layer 2–3 traffic generation and analysis with powerful network emulation and application layer protocols for emulating a wide range of device types, users and protocols. The C50 delivers the highest performance per dollar for Layer 2–3 testing in a compact 3U appliance form factor. The C50's flexibility makes it perfect throughout the test lifecycle for functional, performance and benchmark testing of data center and service provider network infrastructure and evolving SDN and NFV technologies.

Applications

- **SDN and data center:** Validate forwarding performance and functional capabilities of Software Define Networks (SDN) with ultra-low latency and flexible port density. Supports key technologies like VXLAN, OpenFlow, PCE, Segment Routing and BGP-LS
- **Device benchmarking:** Test using IETF RFC 2544, RFC 2889 and RFC 3918 methodologies with easy test setup using dynamically bound traffic and automated wizards
- **Core and edge routers & switches:** Verify scale, reliability, performance of Layer 2 & 3 services including data, multicast, and video delivered via unicast routing, multicast routing, switching, and MPLS VPN technologies
- **Carrier Ethernet:** Verify scale, reliability, performance of Ethernet services delivered via Ethernet OAM, MPLS-TP, VPLS, PWE3 Psuedowires, bridged Ethernet, packet transport protocols, or combinations of these technologies
- **Subscriber emulation:** Verify setup & teardown of thousands of access subscribers using different services over various tunneling technologies (VLAN, L2GRE, MPLS, VPNs, VPLS, etc...) under normal or exceptional traffic conditions



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Technical Specifications

C50 Specifications

Media support	Support varies by module speed mode: • 100G: 100GBASE-SR4, 100GBASE-CR4, 100GBASE-LR4, plus additional MSA PMDs • 50G: 25/50G Consortium 50GBASE-CR2 • 40G: 40GBASE-SR4, 40GBASE-CR4, 40GBASE-LR4 • 25G: 802.3by 25GBASE-CR, 25GBASE-CRS, 25GBASE-SR • 10G: 10GBASE-SR, 10G Copper DAC • QSFP28 to SFP28 breakout cable options
Inter-NIC and inter-system time synchronization	Ports in the same chassis are phase-locked to the internal timing source. For separate systems: • Timing chain synchronization with +/- 20ns • Synchronized via GPS or CDMA network • Using NTP or PTP packet-based approaches
User reservation	Per QSFP28 port
Tx/Rx streams per port	• Stats/Streams @100G; Tx=8K Rx=16K/4K (Basic Stats/ Latency stats) • Stats/Streams @50G; Tx=8K Rx=8K/2K (Basic Stats/ Latency stats) • Stats/Streams @40G; Tx=8K Rx=8K/2K (Basic Stats/ Latency stats) • Stats/Streams @25G; Tx=4K Rx=4K/1K (Basic Stats/ Latency stats) • Stats/Streams @10G; Tx=4K Rx=4K/1K (Basic Stats/ Latency stats)
RIT or List VFD Entries per Stream	8 RIT insertions per stream and 4 VFD insertions per stream
Frame length range and controls	100% line rate for frames of 58-16383 bytes controlled by fixed, increment, decrement, random, and IMIX modes
Per-stream statistics analyzed in real time Tx and Rx frame counts and rates	• Tx and Rx Layer 1 byte counts and rates • Out of sequence errors • FCS errors and rate • Min, Max and Average Latency (16383 streams) • Real Time Dropped Frame count • Previous, Max, Total Jitter • Full Adv Seq Stats at 100/50/40 only
Per-port statistics analyzed in real time Tx and Rx frame counts and rates	• Tx and Rx Layer 1 byte counts and rates • Out of sequence errors • PRBS errors • FCS errors and rate
Line clocking and packet time stamping - transmit line clocking and time stamping from the built-in hardware timing interface	• Stratum-3 oscillator default time source: adjustable by +/- 102PPM • Frame time stamp resolution is 2.5ns • NTP and PTP support
Capture	8 MB per port
Physical	3U H x 16.53” W x 19.75” D, weight: 32 lbs. (14 kg)
Environmental	Operating temperature: 5 C–35 C, 10%–90% RH (non-condensing)
Power	115 V–230 V, 50/60 Hz–850 W
Supported applications	Spirent TestCenter Graphical User Interface & supported APIs

Ordering Information

Description	Part number
C50 4-PORT DX3 MULTISPEED 100/50/40/25/10G QSFP28, Layer 2-3 & 2544 Starter Kit	C50-KIT-21-START
2-PORT DX3 100/50/40/25/10 QSFP28, 4-PORT FX2 10/1G SFP+	C50-KIT-23-START

A full complement of Spirent protocol and test packages are available with perpetual and subscription licensing options. Please contact your Spirent sales representative to select the right option for your test needs.

Contact Us

For more information, call your Spirent sales representative or visit us on the web at www.spirent.com/ContactSpirent.

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Rev C | 03/19