



Spirent TestCenter™

SPT-2000A, SPT-5000A AND SPT-9000A CHASSIS

Convergence is creating a new generation of integrated network devices and services that are much more complex than ever before. The resulting increased complexity, scarcity of testing skills and architectural shortcomings in current test systems are hurting the ability of manufacturers to ship products on time at escalating quality levels and slowing service providers' ability to deploy networks that get Quality of Experience.

INCREASE PRODUCTIVITY: GET THERE FASTER WITH SPIRENT TESTCENTER

- Hot swappable modules
- High-speed backplane for parallel downloads
- Multiple users per test module for greater efficiency of resources
- Multi-user application support

Create and execute more complex test cases in less time with the same resources – scale tests higher while debugging problems faster. The results: lower CAPEX and OPEX, faster time to market, greater market share and higher profitability.

Spirent TestCenter contains multiple hardware and software components. There are several chassis, each of which can be populated with a variety of test modules. All chassis are compatible with all Spirent TestCenter product line components. Spirent TestCenter chassis offer the highest number of users per chassis in the industry. All chassis permit “hot swap” on all test modules for easy service or replacement while the chassis is fully operational, and can easily be managed remotely through an IP network.

The SPT-2000A chassis is designed for ease of transport, with a removable carrying handle and a loaded weight of 25 pounds. The SPT-2000A holds up to two modules that can support up to 24 Dual Media Ethernet ports, four 10GbE ports, two Uniphy ports or WAN ports, or a mixture of these port types. The SPT-2000A-HS has higher powered fans, is suitable for use in the lab and supports up to 4 UniPHY or WAN ports as well as all other port types. The SPT-2000A supports large form factor modules natively and small form factor modules using the ACC-2090B carrier card.



The SPT-5000A is a high-density chassis suitable for labs or production test environments where a large number of Ethernet ports are required but rack space is limited. The SPT-5000A has 12 slots, which support up to 96 10/100/1000 Mbps Ethernet ports, 12 10GbE ports, or a mixture of these port types. The SPT-5000A supports small form factor modules.

The SPT-9000A is an ultra high-density chassis that offers optional redundant power, an easy to read LCD and easy to service hardware. It is suitable for the lab or production test environment. The SPT-9000A has 12 slots, supporting up to 144 Gigabit Ethernet ports, 24 10GbE ports, 24 UniPHY or WAN ports or a mixture of these port types. The SPT-9000A supports large form factor modules natively and small form factor modules using the ACC-2090B carrier card.

APPLICATIONS

Using the SPT-2000A portable chassis, equipment manufacturers can test devices in the lab and bring Spirent TestCenter to a customer site to prove their devices' performance capabilities. Service providers and enterprises selecting network equipment can test and benchmark performance for different devices from various manufacturers.

Spirent TestCenter customers can perform comparative analysis of network equipment to determine the suitability of a specific application prior to its deployment. The SPT-5000A chassis is perfect for space sensitive, high volume production testing environments where high density, low cost Ethernet ports are required. The SPT-9000A chassis is suitable where ultra-high port density, low cost Ethernet ports are required with optional redundant power.

BENEFITS

- *Ease of service:* Each chassis supports hot swap on all test modules for easy service or replacement while the chassis is fully operational
- *Flexible operations:* Multi-user operation provides maximum efficiency in hardware resource use

- *Reduce time on system upgrades:* High speed chassis backplane provides parallel downloads for system updates
- *Reduce cost:* Use the same hardware platform to perform research and development, comprehensive functional testing and high scale performance testing. All chassis supports multiple users with a single software license.

KEY FEATURES

- Comprehensive temperature monitoring with visual indicators (9U Chassis)
- Supports hot swap of all test modules
- Supports multi-user operation
- Synchronize up to 255 chassis for high density test beds
- Automatically calibrate synchronization between chassis
- Works with the Spirent TestCenter software applications for comprehensive functional testing, conformance testing and performance analysis all in one system
- Provides GPS (Global Positioning System), CDMA (Code Division Multiple Access) TIA/EIA-95B, external timing reference support and NTP (Network Timing Protocol)
- Supports 10/100/1000 Mbps (half/full duplex in 10/100 mode) Ethernet connections to a host PC, and can be set for auto-negotiation or speed is completely configurable
- 19" rack-mountable
- Easy to read LCD (available on SPT-9000A) provides system status, errors and other configuration information
- Replaceable fan tray (available on SPT-9000A)
- Optional redundant power (available on SPT-9000A)

UNIFIED ADMINISTRATION

Save time with unified administration of the Spirent TestCenter system. The Spirent TestCenter system software provides a set of tools to manage your entire investment in Spirent TestCenter components – hardware, firmware, software and licenses.

- Discover all of the Spirent TestCenter chassis on your network and group them into useful profiles.
- Refer to a single interface for the rich set of information available about each Spirent TestCenter chassis, test module and port group: serial number, IP addresses, hardware model, media type, firmware version, log files, real-time status of key resources and more.
- Manage your Spirent TestCenter firmware. Simultaneously download new firmware to multiple chassis and test modules.
- Examine your Spirent TestCenter software licenses on the chassis to which each license applies, and other important license information. The administration function tool can be used to download license keys to chassis and to append newly purchased licenses to existing ones.

TECHNICAL SPECIFICATIONS

SPT-2000A/SPT-2000A-HS Technical Specifications

- Spirent TestCenter 2U, 2-slot portable chassis
- Supports up to 16 10/100/1000 Mbps Ethernet ports, 16 Gigabit Ethernet ports, 24 dual media Gigabit Ethernet ports, 4 10GbE, 2 UniPHY, 2 WAN ports, ports or a combination of these port types. The SPT-2000A-HS can support 4 UniPHY, 4 WAN ports or any combination of all test modules.
- Portable design with an easy to remove handle for optional rack mounting
- Horizontal module slot orientation
- Built-in module locking security mechanism to prevent unwanted removal of modules

- Power: 100-120/220-240 VAC. Nominal 115 or 230 VAC, 50-60 Hz., 12A MAX Inlet AC requirement 1/2 115V @15A (863W AC nominal) circuit, output DC power of power supply is 500W
- BTU Requirements: 2500 BTU/h (assume 80% heat load for air conditioning)
- Dimensions: 15"W x 3.5"H x 21"D (38.1W x 9H x 53.3D cm)
- Weight: 25 lbs. (11.3 kg) fully loaded. Shipping weight approx. 28 lbs. (12.7 kg)
- Operating environment: 59° to 104° F (15° to 35° C); 20% to 80% relative humidity. Must have 6-inch space for unimpeded airflow into the chassis fans and blank panels inserted on empty slots.
 - Note: The EDM-2003A/B and the MSA-2001A/B modules when installed in the SPT-2000A chassis have a maximum operating environment of 86 degrees (30° C). There are no restrictions on SPT-2000A-HS.
- Front panel LEDs: power, fan, link, status, and over temperature
- Back panel LEDs: activity/collision, link/error, 10/100Mbps, and 1000Mbps
- Ethernet connection: 10Base-T connector 10/100/1000 Mbps (half/full duplex in 10/100 mode)
- Connectors: DB9 serial console; RJ-45 expansion in/out connectors for multiple chassis connection; RJ-45 BITS clock connector; connectors to attach to an external GPS or CDMA receiver



Spirent TestCenter SPT-2000A



SPT-5000A Technical Specifications

- Spirent TestCenter 5U chassis with 12 test module capacity
- Supports up to 96 10/100/1000 Mbps Ethernet ports, 96 Gigabit Ethernet ports, 48 dual media Gigabit Ethernet ports, or 12 10GbE ports or a combination of these port types
- Horizontal module slot orientation
- Optional module locking security mechanism to prevent unwanted removal of modules
- Power: 100-240 VAC. Nominal 115 or 230 VAC, 50-60 Hz Inlet AC requirement 1 115V @15A (1725W AC nominal) circuit, output DC power of power supply is 1200W
- BTU requirements: 5000 BTU/h (assume 80% heat load for air conditioning)
- Dimensions: 17.5"W or 19"W (with rackmount ears) x 8.5"H x 19.75"D (44.45W x 21.6H x 50.165D cm)
- Weight: 54 lbs. (24.4 kg) fully loaded. Shipping weight approx. 58 lbs. (26.3 kg)
- Operating environment: 59° to 104° F (15° to 40° C); 20 to 80% relative humidity. Must have 6-inch space for unimpeded airflow into the chassis fans, and out of the chassis vents. Must also have blank panels installed for all empty slots.
- Front panel LEDs: power, fan, link, status, and over temperature
- Back panel LEDs: activity/collision, link/error, 10/100Mbps, and 1000Mbps
- Ethernet connection: 10 Base-T connector 10/100/1000 Mbps (half/full duplex in 10/100 mode)
- Connectors: DB9 serial console; RJ-45 Expansion In/Out connectors for multiple chassis connection; RJ-45 BITS clock connector; connectors to attach to an external GPS, or CDMA receiver

SPT-9000A Technical Specifications

- Spirent TestCenter 9U chassis with 12 test module capacity
 - Supports up to 96 10/100/1000 Mbps Ethernet ports, 96 Gigabit Ethernet ports, 144 dual media Gigabit Ethernet ports, 24 10GbE ports, 24 UniPHY ports, 24 WAN ports or a combination of these port types
 - Built-in module locking security mechanism to prevent unwanted removal of modules
 - Vertical module slot orientation
 - Power: 100-240 VAC. Nominal 115 or 230 VAC, 50-60 Hz. The SPT-9000A chassis comes standard with two 1200-Watt power supplies, each requiring its own 15 AMP circuit
 - 2 power supplies – Inlet AC requirement 2 115V @15A (3450W AC nominal) circuits, output DC power of power supply is 1200W per power supply or 2400W total)
 - 3 power supplies – Inlet AC requirement 3 120V/15A (5175W AC nominal) circuits, output DC power of power supply is 1200W per power supply or 2400W total. Note: Three power supplies required for 14 or more UniPHY or WAN ports.
 - BTU Requirements:
 - 2 power supplies – 10,000 BTU/h
 - 3 power supplies – 15,000 BTU/h (assume 80% heat load for air conditioning)
 - Redundant power supply option: hot swappable third power supply. Note: Power redundancy is module configuration dependent.
 - Removable fan tray for easy maintenance
 - Dimensions: 17"W x 15.75"H x 20"D (48.3W x 21.6H x 50.165D cm)
 - Weight: 110 lbs. (49.8 kg) fully loaded. Shipping weight approx. 130 lbs. (59 kg)
 - Operating environment: 59° to 104° F (15° to 35° C); 20 to 80% relative humidity. Must have 6-inch space for unimpeded airflow into the chassis fans, and out of the chassis vents. Must also have blank panels installed for all empty slots.
- Front panel LCD: Scrolls and displays chassis currently configured IP Address, Gateway, Netmask, temperature and other information for easy verification of chassis configuration and error messages
 - Front panel LEDs: power, fan, link, status and over temperature
 - Back panel LEDs: activity/collision, link/error, 10/100Mbps, 1000Mbps
 - Ethernet connection: Two 10Base-T connectors (one on the front and one on the back, only one can be active) 10/100/1000 Mbps (half/full duplex in 10/100 mode)
 - Connectors: Two DB9 serial console (one on the front and one on the back, only one can be active); RJ-45 Expansion In/Out connectors for multiple chassis connection; RJ-45 BITS clock connector; connectors to attach to an external GPS or CDMA receiver


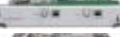

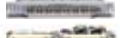
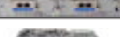
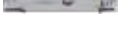


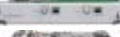
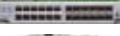


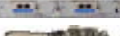












Spirent TestCenter SPT-9000A

SUPPORTED MODULES

Series 1000 modules provide a cost effective, high density Layer 2/Layer 3 scalability with routing capabilities. Series 2000 for high performance, advanced Layer 2/Layer 3, Layer 4 to Layer 7, IPTV and routing testing. Contact your Spirent representative for details. Note: the Spirent TestCenter SPT-2000A-HS chassis is for lab use only.



Part Number	Description	SPT-2000A-HS	SPT-2000A	SPT-5000A	SPT-9000A
Series 1000					
 CPR-1001B	10/100/1000 Copper RJ-45, 8 Port (SFF)	✓*	✓*	✓	✓*
 EDM-1001B	10/100/1000 Dual Media, 4 Port (SFF)	✓*	✓*	✓	✓*
 EDM-1002B	10/100/1000 Dual Media, 2 Port	✓	✓		✓
 EDM-1003B	10/100/1000 Dual Media, 12 Port	✓	✓		✓
 FBR-1001B	1GbE Fiber SFP, 8 Port (SFF)	✓*	✓*	✓	✓*
 MSA-1001B	10GbE Multi-MSA Host module, 2 Port	✓	✓		✓
 XFP-1001B	10GbE XFP, 1 Port (SFF)	✓*	✓*	✓	✓*
Series 2000					
 CPR-2001B	10/100/1000 Copper RJ-45, 8 Port (SFF)	✓*	✓*	✓	✓*
 EDM-2001B	10/100/1000 Dual Media, 4 Port (SFF)	✓*	✓*	✓	✓*
 EDM-2002B	10/100/1000 Dual Media, 2 Port	✓	✓		✓
 EDM-2003B	10/100/1000 Dual Media, 12 Port	✓	✓		✓
 FBR-2001B	1GbE Fiber SFP, 8 Port (SFF)	✓*	✓*	✓	✓*
 CPR-2002B	10/100 Copper RJ-45, 8 Port (SFF)	✓*	✓*	✓	✓*
 MSA-2001B	10GbE Multi-MSA Host Module, 2 Port	✓	✓		✓
 UPY-2001A	10G Host Module, 1 Port	✓	✓		✓
 UPY-2002A	10G Host Module, 2 Port	✓			✓
 WAN-2002A	2.5G WAN Host Module, 2 Port	✓			✓
 XFP-2001B	10GbE XFP, 1 Port (SFF)	✓*	✓*	✓	✓*
Other Modules					
 GBT-4001A	10GBASE-T Personality Board	✓			✓
 SFP-4001A	OC-48/12/3 SFP Personality Board	✓	✓		✓
 XEN-4001A	XENPAK Personality Board	✓	✓		✓
 XFP-4001A	XFP Personality Board	✓	✓		✓
 XFP-4004A	UniPHY/OC-192 XFP Personality Board	✓	✓		✓
 XTO-4001A	X2 Personality Board	✓	✓		✓
ACC-2090B	SFF Card Carrier/Adapter for SPT-2000A/SPT-9000A	✓	✓		✓
CPU-5001A	10/100/1000 Copper RJ-45, 8 Port, CPU Module	✓			✓

(SFF=Small Form Factor)

*Requires ACC-2090 Card Carrier



CPR-2001B



EDM-2003B

REQUIREMENTS

- Pentium® or greater PC running Windows® XP Professional SP2 with mouse/color monitor required for GUI operation. See Minimum PC Requirements section.
- One Ethernet cable and one 10/100/1000 Mbps Ethernet card installed in the PC
- Operating system languages supported: English, French, German, Italian, Japanese, Korean and Chinese (traditional and simplified) or test automation system requirements refer to the Spirent TestCenter Automation data sheet (P/N 79-000037)

MINIMUM PC REQUIREMENTS

- Small Port System: 1-25 ports
 - 2.4GHz Pentium 4 or equivalent with 512MB of free RAM and 10GB of free disk space
- Medium Port System: 26-75 ports
 - 3GHz Pentium 4 or equivalent with 2GB of RAM and 15GB of free disk space
- Large Port (75+ ports)
 - E6400 Intel® Core™ 2 Duo or equivalent with 3GB of RAM and 100GB of free disk space

ORDERING INFORMATION

Product	Part Number
Spirent TestCenter 2U Chassis and Controller (desktop use)	SPT-2000A
Spirent TestCenter 2U Chassis and Controller with High Speed Fans (Lab use only)	SPT-2000A-HS
Spirent TestCenter 5U Chassis and Controller	SPT-5000A
Spirent TestCenter 9U Chassis and Controller	SPT-9000A
Redundant/additional power supply for SPT-9000A	ACC-9001A
Spare Fan Tray for SPT-9000A	ACC-9002A
Lock Bar for SPT-5000A Chassis	ACC-5000A
19" Rackmount for SPT-2000A	ACC-2006A
SFF card carrier/adaptor for SPT-2000A/SPT-9000A chassis	ACC-2090B
Card slot cover	ACC-2008B*

*ACC-2008B required for all chassis containing UniPHY or WAN modules.

Spirent TestCenter SPT-2000A, SPT-5000A AND SPT-9000A CHASSIS

SPIRENT GLOBAL SERVICES

Spirent Global Services optimizes your productivity with Spirent TestCenter over a broad range of technologies:

Professional Services

- Test lab optimization: Test automation engineering services
- Service deployment and service-level optimization: Vendor acceptance testing, SLA benchmarking, infrastructure and security validation
- Device scalability optimization: POC high-scalability validation testing

Education Services

- Web-based training: 24 x 7 hardware and software training
- Instructor-led training: Hands-on methodology and product training
- Certifications: SCPA and SCPE certifications

Implementation Services

- Optimized new customer productivity with up to three days of on-site assistance

Visit www.spirent.com/gs or contact your Spirent sales representative.



Spirent Communications
1325 Borregas Avenue
Sunnyvale, CA 94089 USA

SALES AND INFORMATION
sales@spirent.com
www.spirent.com

Americas
T: +1 800.SPIRENT
+818 676.2683

Europe, Middle East, Africa
T: +33 1 6137.2250

Asia Pacific
T: +852 2511.3822