

Spirent SPT-N11U Mainframe Chassis

The Spirent SPT-N11U mainframe chassis is the foundation for Spirent's new 10GbE, 40GbE and 100GbE test modules. By optimizing the design with the latest hardware and software technology, the SPT-N11U lowers the cost of testing the devices and networks powering the always-on data network.

The SPT-N11U simultaneously scales to the highest port counts and test traffic rates in the industry while incorporating innovative time- and money-saving capabilities such as: built-in touchscreen administration, intelligent power and fan control, and fast booting and system firmware upgrades.

With its efficient architecture, the SPT-N11U supports a variety of environments from multi-user functional testing all the way up to multi-chassis switch fabric and core-router stress testing. A single chassis can scale to nearly 10 terabits of data traffic - more than double that of the competition - supporting enough protocol scale to push any modern router architecture beyond its limits.

Features & benefits

- Less rack space and power than equivalent competing systems
 - Intelligent power and fan control
 - Scales to nearly 10 terabits of cloud traffic per second
 - Supports up to 144 40G ports, 576 10G ports, or 96 100G Ethernet ports per chassis
- Investment protection for existing hardware and future technologies
 - Fully backward compatible with existing Spirent HyperMetrics and HyperMetrics NEXT test modules*
 - Does not require learning new UIs or APIs
 - 400G Ethernet ready
- Measurement reliability and accuracy
 - Best-in-class timing precision and synchronization (ten times better than the nearest competition) for large-scale tests and site to-site latency/jitter measurements
 - Automatic calibration for chassis-to-chassis synchronization
- Innovative design
 - Built-in touchscreen for real-time chassis status and administration
 - 4x times faster boot time and 3x times faster firmware upgrades than previous systems
 - Built-in timing synchronization capability including 1588v2 connector
 - Client software download from the chassis via Web browser



* Requires ACC-2017A or ACC-2018A card carrier adapter. Please contact your Spirent sales representative for the list of supported modules.

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Specifications

Chassis design & form factor	<ul style="list-style-type: none"> ■ EIA 19" rack compatible, 11RU high, front or mid-rack mounting ■ 12 test module slots 	<ul style="list-style-type: none"> ■ Front and side front to back airflow ■ Field replaceable fan trays, system controller, system hard drive, and power supplies
Administration & operation	<ul style="list-style-type: none"> ■ Up to 32 simultaneous users per chassis ■ IPv4 and IPv6 admin network compatible ■ Built-in Android touchscreen 	<ul style="list-style-type: none"> ■ Secure SSH terminal emulation via ethernet ■ Direct via external video connector and USB ports
Timing synchronization	<p>Native support for:</p> <ul style="list-style-type: none"> ■ PTP (IEEE 1588v2 Precision Timing Protocol) ■ NTP (Network Timing Protocol) 	<p>Via connected ETR:</p> <ul style="list-style-type: none"> ■ GPS (Global Positioning System) ■ CDMA (Code Division Multiple Access) TIA/EIA-95B

Direct Chassis Chaining and Automatic Sync Cable Calibration

Indicators and controls	<ul style="list-style-type: none"> ■ System power on/off ■ Controller reset ■ Built-in LCD touchscreen 	Front panel LEDs:	<ul style="list-style-type: none"> ■ Temperature, fan, admin link, system and system power status ■ Test module slot power status 	Rear panel LEDs:	<ul style="list-style-type: none"> ■ Admin ethernet link, speed and activity ■ Chassis synchronization Master/Slave and status
Physical	<ul style="list-style-type: none"> ■ Dimensions: 17.5"W x 19.25"H x 33.3"D (44.45 cm x 48.9 cm x 84.6 cm); 30" (76.2 cm) depth measured from front mounting flange ■ Installation and shipping weight: 105 lbs. (47.6 kg) (3 system and 2 slot PSUs and fans installed, no test modules installed) ■ Approximate weight fully loaded: 243 lbs. (110 kg) 				
Power	<ul style="list-style-type: none"> ■ Inlet AC for STC-N11U-110: 7 x 115V @ 12 A, or 7 x 230V @ 6A; one circuit dedicated for system operation and one circuit per two test module slots ■ Inlet AC for STC-N11U-220: 4 x 230V @ 12A; one circuit dedicated for system operation and one circuit per 4 test module slots ■ Peak power requirement: 7kW for fully loaded chassis 				
Environmental	<ul style="list-style-type: none"> ■ Operating requirements: 59° to 95° F (15° to 35° C); 20% to 80% relative humidity. Some modules require 30° C ambient temperature. Please contact Spirent for the most up to date list. ■ Heat dissipation: 20,000 BTUs/h (assumes 80% heat load for air conditioning) ■ Warning: The SPT-N11U is designed for operation in an unattended room (e.g., datacom or telecom equipment room). The system can generate noise levels up to 90.7 dB (Aweighted sound power level, LWA as measured per ISO 3741 Sound Power Noise Measurement), and appropriate ear protection should be worn when working in proximity to the chassis. Please contact your employer or local health and safety agencies for specific guidelines for your working environment. 				
Connectors	<p>Front panel: 4 x USB 2.0 (keyboard or mouse)</p> <p>Rear panel:</p> <ul style="list-style-type: none"> ■ DVI-I / VGA D15 video (console) ■ 2 x USB 2.0 (keyboard or mouse) ■ 1 PPS and 10 MHz BNCs and DB9 serial DCE (for ETR support) ■ 10/100/1000M BASE-T RJ-45 Ethernet (admin) ■ Synch in/out RJ-45 (chassis synch chain) ■ 10/100/1000M BASE-T RJ-45 (PTP/NTP) ■ System hard drive access panel 				

Ordering information

Spirent chassis	Part number
Spirent N11U chassis and controller with 110V AC power supplies	SPT-N11U-110
Spirent N11U chassis and controller with 220V AC power supplies	SPT-N11U-220
Accessories	
Hypermetrics single-slot card carrier for N11U/N4U chassis	ACC-2017A
Hypermetrics dual-slot card carrier for N11U/N4U chassis	ACC-2018A
C20 to C19 PWR CORD, CHS-N11U or CHS-11U to PDU, 20A 250V	ACC-2020A
4-post rackmount tray kit for CHS-N11U	ACC-2021A

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