



## RXT-1200 Family

### Modular Test Platforms

The RXT-1200™ addresses the challenges of communication service providers to increase efficiency and productivity in fast evolving technology fields. The flexible test platform lowers operational and capital expenditures associated with handling multiple technologies required to address today's and tomorrow's Access, Business, Metro, Datacenter, Transport and Core services.

Originally designed as “the test set of the future”, the RXT-1200's modularity is still keeping up with leading-edge technology evolution. The RXT-1200's capability to combine multiple technologies into a rugged modular platform increases the productivity of engineers and technicians who are responsible for the design, verification, installation, and maintenance of today's complex services from legacy to state-of-the-art technologies. RXT-1200's intuitive user interface boosts productivity, helping technicians and field support engineers by making their job easier, accelerating the learning curve, and reducing training requirements.

RXT-1200 continues to represent the next-generation in integrated toolkits for field technicians, combining advanced multi-service testing capabilities, built in a single high-performance compact format.

Testing is one important part of the daily tasks and the RXT-1200 leads your workforce to go beyond testing and into getting the job completed quickly and accurately on the first dispatch.



### Platform Highlights

- The RXT family of advanced test modules offer a full range of link and service testing capabilities, from Core to Access, from Lab to Field and from 64k to 400G, with a complete range of communication technologies, including OTN, SDH/SONET, PDH/DSn, Carrier Ethernet, SyncE, 1588v2 PTP, Fibre Channel, CPRI, OTDR, OSA. All supported by a single rugged forward-looking hand-held test platform.
- Modern test platform, with a broad range of available test modules covering Access (copper and fiber), Metro, Datacenter, Transport and Core technologies, including DWDM
- Application-oriented GUI
- GUI familiarity across different test modules and other VeEX products reduces the learning curve
- View test results and create detailed reports by region, area, system, and technician
- Enables all jobs to be completed correctly the first time
- Multi-technology: Fiber Optics, WDM, DSn/PDH, SONET/SDH, OTN, Ethernet, Fibre Channel, CPRI/OBSAI; from 64 kbps to 800 Gbps
- Expand test functions with a growing list of test modules
- Future-proof cost-effective platform
- Test set connectivity via Ethernet Management interface, WiFi, Bluetooth®, or 4G/5G Data Card for back office applications and workflow optimization
- User defined test profiles and thresholds

## Test Modules & Technologies

### Multi-service Test Modules

The all-in-one RXT-3400 offers a comprehensive combination of legacy and state-of-the-art transmission and protocol technologies. From 64 kbps to 14 Gbps (16G FC), these modules cover all day-to-day testing requirements, including Fiber Optics, C/DWDM, Carrier Ethernet, SyncE, PTP, Fibre Channel, OTN, SDH/SONET, PDH/DSn, CPRI/OBSAI, Synchronization, among others. Transport, Core, Datacenter, Metro, SAN, Access, Backhaul and Fronthaul (DAS) applications.

### 100G Multi-service Test Module

The RXT-6200+ is a perfect complement to the RXT Platform, extending its testing range to 100 Gbps. It offers state-of-the-art testing capabilities from 10 Mbps to 100 Gbps, including Carrier Ethernet, SyncE, Fibre Channel, OTN, SDH/SONET, among others. Fast troubleshooting and comprehensive analysis of transmission problems can be performed using its common graphical user interface. Novice users benefit from the easy-to-use GUI, while experienced users will appreciate an array of advanced features such as OTL/PCS, CAUI-4/XLAUI Lane BERT, Service Disruption, overhead monitor/control, Tandem Connection Monitoring, Protocol Capture/Decode, BERT, Throughput test, and much more.

### 400G Multi-service Test Modules

The RXT-6400x family of modules are truly portable 400G test sets, supporting native PAM4 QSFP-DD and OSFP. Equipped to support all common transceiver form-factors, these modules are a perfect complement to the RXT Platform, extending its testing range to 400 Gbps and offering all-in-one 1GE-to-400GE testing capabilities. Installation, verification, commissioning, evaluation and maintenance tasks are simplified thanks to a combination of intuitive GUI and powerful test functions. Novice users benefit from the easy-to-use GUI, while experienced users will appreciate an array of advanced layer 1-4 features, such as FEC codeword Error distribution analysis, PAM4 pre-emphasis, skew, transceiver check and stress, Lane BERT, Throughput test, IPv4/IPv6, transceiver testing and much more.

### Fiber Optics Modules

The RXT-4100 Fiber Optics test module family features a variety of full-featured physical layer test tools with a range of Optical test functions. They include the first Tunable CWDM and DWDM OTDRs for testing optical Mux/Demux, verify channel routing and end to end connectivity, as well as traditional OTDR, OPM, Light Source and VFL.

### C/DWDM OSA Modules

The RXT-4500 family of OSA Module offer Optical Spectrum and Channel Analyzer functions for CWDM and DWDM networks. Using superior micro-optic design and MEMS tuning technology, the RXT-4500 modules measure key optical parameters such as wavelength, channel power, OSNR and offer the added ruggedness required in field testing.

- Fast and efficient test result transfer to USB memory stick , FTP or VeSion® R-Server
- Built-in VeSion® R-Server™ client for test results upload, workflow integration, and asset management.
- Flexible remote access and remote control via EZ Remote™, web browser, VNC®, ReVeal RXTS PC software, and SCPI commands.
- Available RXT-1202 high-power platform, capable of running up to four simultaneous tests, including 2x 400G and high-power class transceivers.
- Ultra-high capacity field-exchangeable Li-ion battery pack extends testing time.
- Optional built-in high-precision multi-band GNSS Receiver and/or Atomic Clock references for frequency and timing applications.
- Color LCD with touch screen.

RXT field-replaceable modules allow flexibility to fit any application, for example, legacy, Access, Carrier Ethernet, SAN, DAS, WDM, 400GE, 200G, 100GE, OTU4, Fiber, and much more. Common graphical user interface (GUI), among different applications, reduces the learning curve.



### QuickSwap™ Modularity

- Flexible Test Module design eliminates physical limitations and accommodates different module sizes allowing future growth of the RXT-1200 platform into more complex technologies and high-end applications
- Reduces time to switch technologies, identify and correct problems, eliminates repeat service visits, eliminates the need to carry multiple test sets
- No tools required



### Durable and Field Upgradeable Platform

- One compact, lightweight, and rugged forward-looking design
- Modular software adds even more flexibility
- VeExpress™ license management system (test module dependent)



## VeExpress™

Minimize CAPEX and optimize OPEX by managing your test set fleet with VeExpress cloud service. VeEX's test sets are based on all-inclusive hardware platforms, offered at a low cost entry point, and can be configured for specific applications using software licenses. VeExpress manages test sets (hardware) and their test functions (licenses).

Stop purchasing test sets loaded with extra features or modules, just in case, or placing multiple orders with varying configurations for different user groups or applications. Reduce your CAPEX by buying what you really need and proactively manage your software and hardware assets.

Own, rent or lease-to-own the required test features, in the right quantities, to optimize your OPEX by sharing those specialized test features not required on a daily basis.

- Buy commonly used test functions required to get the day-to-day job done.
- Lease newly adopted technologies without the risk of paying for it up-front.
- Rent test features used on a contingency-basis for special cases or projects. Rent ticker only starts when the feature is first assigned and used.
- Share the software license pool among different users, including owned, leased and rented features.

VeExpress secure cloud-based environment provides the redundancy and speed of geographically-distributed servers around the world as well as scalability and up time. Test sets and web clients automatically connect to the closest/fastest server available.

- Improve first-dispatch success by making sure test sets are up-to-date, have all required test features to get each job done right the first time.
- Missing a test function? Supervisors can assign test features on the go, making them immediately available in the test set, using VeExpress. Less time wasted due to unexpected cases. Automatic approval mode is also available for users to share licenses directly.

## License Management

- Retrieve licenses for new test functions (purchased or rented).
- Share test features assignment with floating licenses.
- Test features are no longer tied to specific test sets, so software assets can be reallocated as needed.
- Track test sets and usage.
- Manage software versions to keep all test sets aligned to the latest approved software version. With time saving "Delta Push" software upgrade mechanism, no need for a full software upgrade each time.
- Simple to use VeExpress client interface is fully integrated into the test set to avoid getting in the way of users' daily tasks.
- Intuitive web-based VeExpress client interface for users and managers.

## Asset Management

- Buy, rent or lease new test functions.
- Share test features assignment with floating licenses.
- Test features are no longer tied to specific test sets, so software assets can be reallocated as needed.
- Track test sets and usage.
- Manage software versions to keep all test sets aligned to the latest approved software version. With time saving "Delta Push" software upgrade mechanism, no need for a full software upgrade each time.
- Simple to use VeExpress client interface integrated into the test platform to avoid getting in the way of users' daily tasks.
- Intuitive web-based VeExpress management interface for users and managers.
- Request, release, and share licenses directly from the test set.
- Set time limits for shared licenses, so they go back to the pool and become available to others, even if the user forgets to return them.
- Auto-renew function to assure interrupted use of shared licenses.

## VeSion® R-Server Client Option

Part of VeEX's VeSion® centralized monitoring and management solutions, the R-Server Workflow and Asset Management system provides crucial tools to manage fleets of technicians, test equipment, standardized test profiles, thresholds, centralized test results collection, reporting, jobs/ticketing, and software update delivery to create coordinated and efficient disciplined workforce and test procedures. R-Server enhances the workflow to achieve the level of quality and repeatability required by telecommunications service providers, MSOs and their contractors. The flexible R-Server can be deployed in cloud, hosted, and corporate networks, on physical or virtualized servers.

Makes the job simpler for field technicians as they can download test profiles and upload test results. Supervisors can preset and upload test parameters which are provided to the test sets as profiles. Technicians can simply download profiles, run tests, and upload results to a centralized system that stores and secures the data. No need to worry about losing test results ever again.

### Centralized Workflow Optimization Repository

- Manage your VeEX test sets fleets, distributed across multiple locations, regions, groups (Org Chart) from a centralized location.
- Test result management, indexing, geotagging, and mapping.
- Features a dynamic dashboard that allows users to easily see the results of thousands of tests in graphical format.
- See PASS/FAIL rates and test set usage at a glance.
- Upload, download and share test profiles and test results.
- Advanced Save function appends work order (trouble ticket), comments and extra information to test reports.
- Manage approved software versions for test consistency.
- Inventory and repair tracking.
- Seamless integration with job ticketing and work order management systems.

### Tamper-proof Operation

- Lock profiles, enforce registration, date, and time on test sets.
- Consistent test environment: Assures all test sets are running approved software versions.
- Org Charts: Distribute and manage assets by regions, districts or groups, with multiple levels of visibility.
- Theft-deterrent function can activate "time bomb" to disable misplaced assets (test sets).

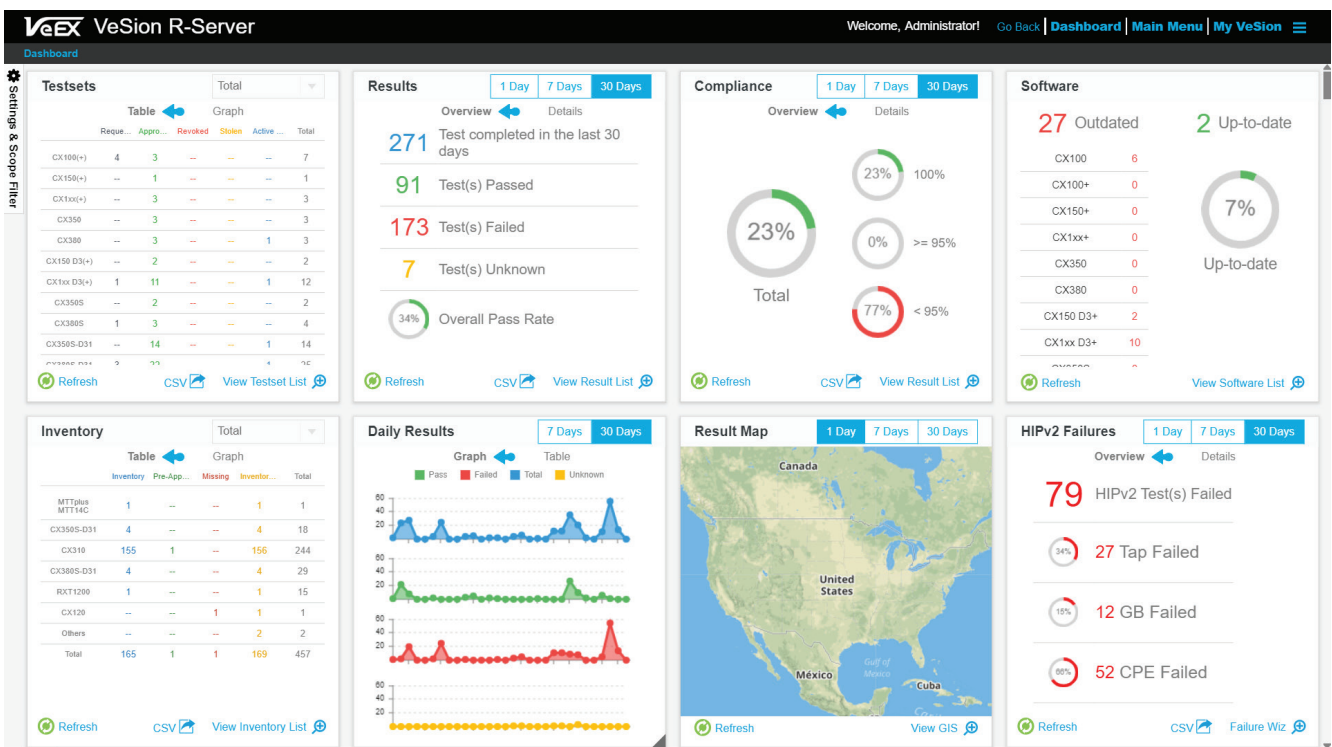
### Advanced Test Results Management

It allows users to augment test reports by appending work order information (e.g. Job ID, account) as well as GNSS-traceable geo-location coordinates, map, GNSS-based timestamping, and comments.

- Compatible with R-Server database, search, reporting and mapping.
- Accurate tamper-proof location coordinates and timestamp can also be obtained from cellular service, using the V-Connect phone app.
- Test results can be uploaded via LAN, WiFi or cellular data connection.

### VxConnect/V-Connect Mobile Apps

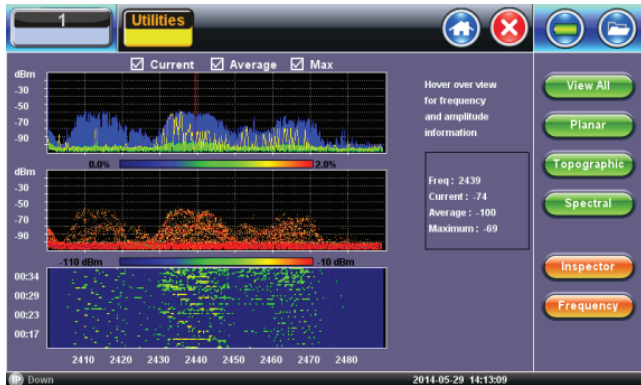
- Allows users to maintain test set's network connectivity with R-Server cloud service, using an iOS or Android devices' Personal Hotspot feature. Additional features include Geotagging and timestamping test results.
- Easy pairing with QR code.
- Bridge mode via Bluetooth(tm)
- Store-and-forward queuing system guarantees results transfer when connectivity is not available.
- Signature capture.
- Append job site pictures to test reports.
- Workflow management integration. Get job assignments, run the test, upload results and close the job. No room for errors or typos.
- Geo-tagging and timestamping test results.
- Secure. Compatible with VPN.



## Network Troubleshooting Tools

### Wi-Fi Spectrum Analyzer

The RXT-1200 offers an optional powerful portable spectrum analyzer on a USB dongle that displays all RF activity in the Wi-Fi bands. With dual 2.4 GHz and 5 GHz bands support, the analyzer covers all 802.11a/b/g/n/ac networks and is the ideal tool for enterprise environments with a mix of wireless technologies.



With multiple graphical format displays it helps to visualize and locate RF signals in the spectrums as well as locate and eliminate interference sources (cordless phones, microwave ovens, Bluetooth devices, etc.), discover and remedy competing access points.

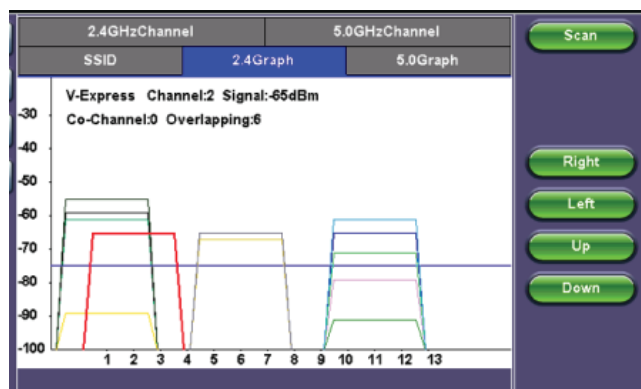
- Frequency Range: 2.400 to 2.495 GHz and 5.150 to 5.850 GHz
- Amplitude Range: -100 to -6.5 dBm
- Antenna: RP-SMA
- Planar, topographic, spectral view

\* Requires optional WiFi Spectrum Analyzer USB dongle.

### WiFi InSSIDer

The WiFi InSSIDer provides the best tools for WiFi networks discovery and performance troubleshooting. With compatible USB WiFi adapter for 802.11 a/b/g/n/ac wireless in 2.4 GHz and 5 GHz bands the InSSIDer provides a clear picture of the environment. It helps identify poor channel placement, low signal strength and interferences in easy to understand graphs and tables.

- Requires compatible USB WiFi adapter for a/b/g/n/ac networks in 2.4 GHz and 5 GHz bands
- Network scan results in Graphical or table format
- Lists: Network names, BSSID, encryption type, channel allocation, signal strength, co-channels, and overlapping channels



### Wi-Fi Wiz

The Wi-Fi Wiz function with USB Wi-Fi adapter for 802.11 a/b/g/n/ac wireless in 2.4 GHz and 5 GHz bands makes troubleshooting Wi-Fi connectivity issues a simple task.

Scan for available networks and view all access points detailed information along with SSID, signal strength and channel allocation. Connect to Access Points with WEP/WPA or WPA2 encryption and verify IP capabilities to ensure the wireless network is properly installed and configured. A full suite of IP testing features is supported (ping, trace, web browser, etc.).

- Requires compatible USB Wi-Fi adapter for a/b/g/n/ac networks in 2.4 GHz and 5 GHz bands
- Access Points scan with signal level and link quality measurement
- WEP/WPA1/WPA2 encryption
- IP Connectivity test (Ping, trace route, ARPWiz, Web browser)
- Provides Wi-Fi LAN access to the test set (e.g. VeExpress, R-Server, Remote Control, ReVeal)

Tools	Scan	Connect	Network
	Ping	Trace Route	ARPWiz
IP Tools	AP List		
Net Wiz	WiFi Scan Finished		
WiFi Wiz	ESSID	BSSID	Channel
Advanced	VeEX Office Protected via WEP	00:1A:DD:A5:51:C1	1
Browser	VeEX-CX180 Protected via WPA2	00:24:B2:C0:02:2C	1
Utilities	VeEX.38 Protected via WPA2	00:16:B6:51:17:4A	6
Files	UXF00 Protected via WPA2	00:22:75:53:BD:7E	6
	VeEX-Mktg14 Protected via WPA2	9C:D3:6D:AC:9C:3E	11

### Net Wiz

Network Discovery Tool

- Discovery: TX Frames, RX Frames, RX Errors, Advertised Speed, Advertised Duplex, Devices found, Networks found
- Devices: Total number, Routers, Servers, Hosts
- Device Details: Attribute, IP address, MAC address, Group Name, Machine Name, Ping OK
- Networks: IP Subnets, Hosts, Domains, Hosts Names

### IP Tools

Provides basic Ethernet and Internet connectivity to the test set as well as connectivity troubleshooting tools to Ethernet Management port (10/100BaseT)

- IP: IPv4 (Static, DHCP)
- Ping, Trace Route check
- HTTP Web browsing internet connectivity check

## Fiber Optic Tools

### Digital Fiber Inspection Scope

Dirty connectors can damage or degrade the performance of expensive optical modules, or produce inaccurate results. Inspecting and cleaning patch cords and pluggable optics connectors before mating them is always recommended.

This option allows digital video microscope probes\* to be connected directly to the RXT-1200 through a USB 2.0 port. Featuring live video feed on the RXT-1200 screen for visual analysis. It offers image capture, compare (before and after), IEC 61300-3-3 Sect 5.4 Pass/Fail templates for SMF and MMF, save, export and generate report to USB flash drives.

Visual Inspection

- Visual file selector
- Image comparison for before-after reports

### Auto-Focus Detection and Analysis option

Test set automatically detects when image is in-focus, captures the image and analyzes it. This process is faster than complex mechanically-driven auto-focus systems as it uses human fast reaction and finesse.

- Analysis per IEC 61300-3-3
- SMF and MMF templates (Core, Cladding, Adhesive and Contact areas)
- Dots or square to highlight contamination, debris and scratches
- Report Generation

\*USB Fiber Scope sold separately. Check its datasheet for details.

### Optical Power Meter GUI\*\*

Supports FX power meters via USB connection.

The optional OPM helps checking for proper output power from optical ports before safely making an optical connection or running a test.

- Numerical and bar graph readings
- Hold function
- Display Units: dBm, mW and  $\mu$ W
- User definable Maximum and Minimum power limits, with color-coded Pass/Fail indication
- Optical Loss Meter function with zero reference calibration
- Loss limit settable in dB, dB/km and dB/mi

\*\* OPM sold separately. For available Wavelength Range, Calibrated Wavelengths, Power Range, Accuracy and Connectors, refer to the FX40/80 specs.

### OTDR Viewer

Built-in OTDR Viewer and Client application provides full post-analysis of SOR traces, as well as control of OPX-BOXe OTDR via direct USB connection, WiFi, or Bluetooth®.

- Traces and Events table view.
- Loss calculations.
- V-Scout Link Mapper option.
- Compatible with Fiberizer Cloud (upload and download).
- Controls external OPX-BOXe OTDR.

### OPX-BOXe OTDR Control

The VeEX OPX-BOXe is an ultra-compact OTDR that can be controlled by the test set using Bluetooth®, WiFi or USB

connection. Once paired or connected to the micro OTDR, the test set displays a virtual OTDR user interface that is used to control the OPX-BOXe and perform measurements. Since fibers are common place in access, metro and transport networks, having a companion add-on OTDR reduces truck rolls since there is less dependence to call on specialized fiber construction crews to verify or troubleshoot fiber related problems.

## Built-in Precision Timing References

The test platform offers highly accurate and stable clock reference options to provide precise frequency, timing and time to its test modules and applications. These internal physical clock references can be used for frequency, phase, timing and wander measurements. Accurate UTC time of day (ToD) from GNSS can be used for time sensitive tests such as PTP timestamping, Time Error and one-way-delay measurements.

Its full timing-oriented atomic clock disciplining combines the long-term accuracy of the GNSS receiver options, the short-term stability of the Atomic Clock option, its battery operation and holdover capabilities, to provide accurate precision clock references even in places where GNSS is not available or can't be trusted (e.g. in-building or urban canyon applications). The test set precision atomic oscillator can also be disciplined by external traceable 1PPS reference from a PRTC (Cs or Rb).

Modular GNSS receiver design makes it easy and inexpensive to keep up with technology evolution and timing improvements. Just replace the GNSS card to have access to state-of-the-art high-precision multi-band multi-constellation technology, improving accuracy and stability. No need to replace the test set, expensive atomic oscillator or the entire timing module.

### High-Precision Multi-band GNSS Receiver Option (Z88-00-010P)

This state-of-the-art built-in Multi-band Multi-GNSS Receiver option is ideal for High-Precision timing applications and Atomic Clock disciplining. Supports up to eight concurrent bands, including GPS, GLONASS, Galileo and BeiDou. True multi-band support provides Ionospheric error compensation, multi-path rejection, jamming and spoofing mitigation, and improves performance in limited sky view scenarios during field measurements. That translates into precise location, UTC time and timing synchronization sources to the test platform, in the form of NMEA messages, ToD and internal GNSS 1PPS clock references.



It offers optimized accuracy and stability with location survey and precision timing mode, providing locked position mode to improve timing stability for stationary applications. This is the recommended module for atomic clock disciplining (PRTC), wander, phase error, time error, holdover, delay measurements, as well as location and timestamp tagging applications.

GNSS: GPS (L1C/A, L2C)  
GLONASS (L10F, L20F)  
Galileo (E1B/C, E5b)  
BeiDou (B1I, B2I)  
Bands: 1207.14, 1227.6, 1246, 1561.098, 1575.42, 1602 MHz  
Tracks up to eight satellite bands simultaneously  
Satellite table with C/No levels in dB-Hz  
Up to 184 channels

Location Survey Lock (reduces position-based wander)

- Precision Timing mode operation (stationary)
- Accuracy Threshold (m)
- Observation Window (s)
- 3D Deviation: <0.5m (clear sky)

Accuracy

- Time:  $\leq 5$  ns @ 1-sigma (clear sky)
- 1PPS Jitter:  $\pm 4$  ns
- Position: 2 m
- Programmable in-survey accuracy threshold and time window

Antenna Cable Delay Compensation (ns)

Antenna Open and Short Detection

Ionospheric error compensation, Multi-path rejection, Jamming & spoofing mitigation

NMEA message log/monitor

Sensitivity

- Cold start: -148 dBm
- Tracking: -166 dBm

Clock Output: 1PPS (internal)

Acquisition Time (first fix)

- Cold start: 26s
- Hot start: 1s

Antenna Power: 0 and 5 Vdc, 60 mA

Connector: SMA, 50 Ohms

Temperature: 0 to 45°C

Recommended Antenna

- High-precision multi-band active antenna supporting GPS (L1C/A, L2C), Galileo (E1B/C, E5B), GLONASS (L10F, L20F), and/or BeiDou (B1I, B2I)
- Bands: 1207.14, 1227.6, 1246, 1561.098, 1575.42 and/or 1602 MHz
- Type: Active with LNA, 3 to 5 Vdc, <50 mA
- Gain:  $\geq 28$  dB
- Noise: <1.5 dB

### GNSS Timing Receiver Option (Z88-00-009P)

This high-sensitivity timing GNSS module (built-in) provides precise location, UTC time and timing synchronization to the test platform, in the form of NMEA messages, ToD and internal GNSS 1PPS clock reference. It offers optimized accuracy with location survey and timing mode. Its timing mode provides a fixed-position mode to improve timing stability for stationary applications. This is the recommended module for atomic clock disciplining (PRTC), wander, phase error, time error, holdover,

delay measurements, as well as location and timestamp tagging applications.

GNSS: GPS (L1 C/A)  
GLONASS (L10F)  
BeiDou (B1I)  
Galileo (E1B/C)

Bands: 1561.098, 1575.42, and 1602 MHz  
Tracks up to two satellite bands simultaneously  
Satellite table with C/No levels in dB-Hz  
Up to 72 channels

Location Survey Lock (reduces position-based wander)

- Precision Timing mode operation (stationary)
- Accuracy Threshold (m)
- Observation Window (s)
- 3D Deviation: <1.3m (clear sky)

Accuracy

- Time:  $\leq 20$  ns RMS (clear sky)
- Position: 2.5m
- Programmable in-survey accuracy threshold and time window

Antenna Cable Delay Compensation (ns)

NMEA message log/monitor

Sensitivity

- Cold start: -148 dBm
- Tracking: -167 dBm

Clock Output: 1PPS (internal)

Acquisition Time (first fix)

- Cold start: 26s
- Hot start: 1.5s

Antenna Power: 5 Vdc, 50 mA

Connector: SMA, 50 Ohms

Temperature: 0 to 45°C

Recommended Antenna

- Dual or Quad GNSS antenna supporting GPS L1 C/A, GLONASS L10F, BeiDou B1I, Galileo E1B/C
- Bands: 1561.098, 1575.42 and/or 1602 MHz
- Type: Active with LNA, 3 to 5 Vdc, <45 mA
- Gain:  $> 26$  dB
- Noise: <1.5 dB

### Atomic Clock Option

The optional built-in chip-scale Atomic Clock module provides highly stable reference sources to the test platform and its modules, in the form of internal 1PPS and 10 MHz signals. The Atomic Clock's integrated disciplining circuit tracks internal and external environmental variables and makes its frequency and timing outputs traceable to GNSS, UTC or external PRTC, and can provide temporary timing holdover or frequency reference for uninterrupted testing or indoor usage.

Technology

- Cesium (Cs) Vapor Cell
- Coherent Population Trapping (CPT) with VCSEL Laser Interrogation

Precision References Outputs (internal)

- Frequency: Atomic 10 MHz
- Phase/Time: Atomic 1PPS

Phase Accuracy

- Disciplined: 1 ns

**Frequency Accuracy**

- Free running:  $\pm 5 \times 10^{-11}$  (at shipment)
- Disciplined:  $\pm 5 \times 10^{-13}$
- Aging:  $< 9 \times 10^{-10}$ /month

**Short Term Stability**

- $3 \times 10^{-10}$  (TAU=1s)
- $1 \times 10^{-10}$  (TAU=10s)
- $3 \times 10^{-11}$  (TAU=100s)
- $1 \times 10^{-11}$  (TAU=1000s)

Fast warm-up time: <180s (independent of hot or cold weather)

Temperature range: 0 to 45°C

**Modes of Operation**

- Free run
- Disciplined
- Holdover
- Sleep Mode >16 hours

**Disciplining**

- Built-in GNSS or external PRTC (1PPS) references.
- Programmable discipline time constant up to 10000s.
- Programmable TE stability threshold.
- Real-time graphical phase alignment monitor allows users in the field (where no other references are available) to know the status of the disciplining process at any time.

**Frequency Calibration Function**

- Recommended interval: Once a year (depending on operation conditions).

**Upgradeable Firmware**

Low power consumption (<180 mW) enables long-term full-featured battery operation required for field applications (independent of hot or cold weather).

**Platform Sleep Mode**

Standby mode allow users to carry the test set in its carrying case with a fully active Atomic Clock in holdover mode. It also helps control the oscillator's temperature for long-term storage in uncontrolled environments.

- Keeps the disciplined Atomic Clock fully powered to hold frequency and timing.
- Holdover time counter while in standby.
- Up to 20 hours of standby power.

**Platform Features & Options**

Dedicated navigation and function buttons for non-touch screen operation (e.g. operating the test set with gloves on)

- Rugged design with integrated connector cover/stand and dual-shot rubber for protection, extra grip, and ergonomics.
- Flexible shoulder straps configurations.
- Integrated stylus holder.

**ReVeal RXTS**

This companion management PC software is included standard with each test set. The ReVeal provides an easy-to-use and intuitive interface that allows users to take full advantage of RXT-1200 test sets by providing the following productivity tools:

- Convenient test profile management.
- Flexible test results management.
- Advanced report generation with html, pdf, or csv formats, combine test results, add logos and comments.
- Test profiles management: Online or offline Ethernet test profile creation, upload and download.

Compatible with Windows XP, 7, 8.1 and 10, 32 bits or 64 bits operating systems.

**Remote Access**

The test platform offers multiple ways to Remote Control it or access the information remotely (e.g. test results, test profiles, etc.). The test set can be reached via:

- ReVeal PC software.
- Web browser (Web Remote Control).
- EZ Remote cloud service.
- VNC® Client.
- SCPI Remote and Command Reference Tool PC software\*.
- Scripting via SCPI commands.
- Connectivity: 10/100Base-T, WiFi 802.11 a/b/g/n/ac\*.

\* Not included

**EZ Remote™**

This secure service offers Remote Access and Remote Control functionalities, allowing users to quickly connect to VeEX test sets located anywhere in the world. It works without the need for complicated VPN settings, port forwarding, firewall holes, exposed public IP addresses or special permissions from IT/Security groups. This VeEX hosted cloud service takes care of all the complex tasks required and presents it to users as a simple application. Connect to meters online anytime, anywhere, using any computer, tablet, or smartphone, with standard web browsers for screen-sharing, remote control and access to test results.

Use EZ-Remote to work remotely, help and coach inexperienced field technicians in real time, run tests, download test reports, collaborate, provide technical support and training.

- Remote Control functionality gives users full control of remote test sets (screen mirroring and mouse control).
- Remote Access functionality allows users to manage test results: View, Download, Rename, Delete, Convert to PDF, etc.
- Multi-platform support.
- Web browser based.
- No software to install.
- Connect using LAN, WiFi or smart phone access point.
- No VPN required. All it needs is Internet access.
- Works through most firewall policies, no special ports to open.
- Basic EZ-Remote cloud service is included with the test set (no extra charge or recurrent fees).

**File Manager**

Profiles: Save and recall test profiles.

Saves results to internal SD card View, Rename, Delete and Lock profile and result files.

Filter and sort by Name, Test Mode, Test Type, Port, Date and Result/Profile.

Report generation: Test results generation in PDF format.

Export test results and profiles via USB memory, Bluetooth, web browser, Data Card or ReVeal RXTS companion PC software.

File Backup and Retrieve to/from USB.

Screen capture: Screen shots in PNG format.



## Supported Test Modules

RXT Test Platforms			Supported Test Modules					
Chassis	Part Number	Description	RXT-6402 2x 400G	RXT-6400x 1x 400G	RXT-6200+ 2x 100G	RXT-3400 2x 16G	RXT-45xx OSAs	RXT-41xx OTDRs
RXT-1200	Z07-00-034P	Smart Productivity Modular Test Platform, for 100G-to-1.5M and Optical test modules			•	•	•	•
RXT-1200+	Z07-00-069P	High-power Smart Productivity Modular Test Platform, for 400G test applications		•	•	•	•	•
RXT-1202	Z07-00-072P	Advanced High-power Smart Productivity Modular Test Platform, for dual 400G test module	•				•	•

### General

#### Data Storage

- Internal: 16 or 32 GB Flash storage
- External: USB Memory stick up to 64 GB (FAT32)
- Remote: Upload via VeSion® R-Server™, FTP or Bluetooth

#### Management Interfaces

- Ethernet: 1x RJ45 10/100Base-T FDX
- WiFi: 802.11a/b/g/n and/or ac (via USB transceiver)<sup>1</sup>
- USB: 2x USB 2.0 Type A
- Bluetooth: Via USB transceiver<sup>1</sup>

#### Precision Clock Sources

- GNSS Receiver<sup>2</sup>: SMA antenna input with 5V GPS/GLONASS/Galileo/Beidou Single or multi-band options
- Atomic Clock<sup>3</sup>: Internal, 1PPS and 10 MHz Free-run (0.05ppb) or Disciplined

#### Display

- 7" TFT color display, 800x480
- Touch screen

#### AC/DC Adapters

- RXT-1200
- RXT-1200+
- RXT-1202
- Battery (B02-09-007G)

#### Chassis Size (W x H x D)

- Chassis Weight
- Module Sizes

#### Modules' Weight

#### Operating Temperature

- Storage Temperature
- Humidity
- Chassis Ruggedness

- Input: 100-240 VAC, 50-60 Hz
- Output: 15 VDC, <9.3A, <140W
- Output: 15 VDC, 12.0A, 180W
- Output: 24 VDC, 12.5A, 300W
- High-capacity Li-ion smart battery
- Field replaceable
- 260 x 180 x 65 mm
- 10.2 x 7.1 x 2.6 in
- 1.86 kg (4.10 lb) with battery
- 208 x 155-175 x 30-77 mm
- 8.2 x 6.1-6.9 x 1.2-3.0 in
- Refer to individual module's specification sheet for details
- 10°C to 50°C (14°F to 122°F)
- Refer to individual module's specification sheet for system wide operation range
- 20°C to 70°C (-4°F to 158°F)
- 5% to 90% non-condensing
- Survives 1m drop to concrete on all sides

<sup>1</sup>Optional USB dongle required. <sup>2</sup>Optional hardware card required. <sup>3</sup>Factory-installed hardware option.



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