

**Giga Access VPN Router**

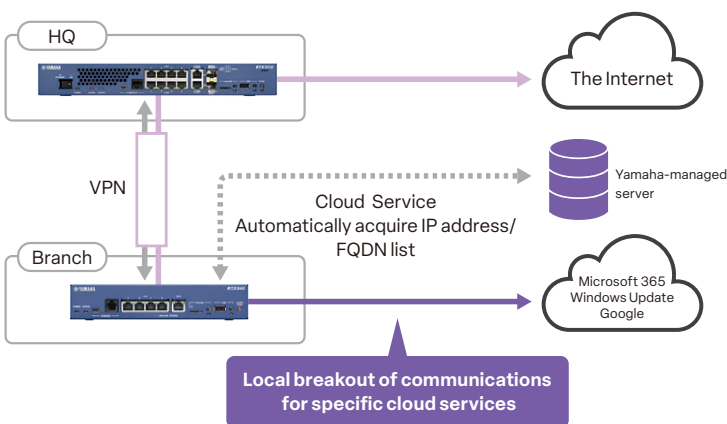
# RTX840

**The Optimal Network for the Cloud-Driven Future**



**Engineered for Reliable and Scalable Cloud Communication**

With advanced hardware architecture and expanded memory capacity, the RTX840 ensures smooth and stable communication even in environments requiring high-load processing. It provides powerful performance and reliability ideal for today's cloud-driven business networks.



**Easy local breakout of major cloud services**

"RTX840" is equipped with a local breakout function by communication destination list (defined by IP address or FQDN) as standard. This function is easy to set, and troublesome maintenance work is unnecessary. The latest communication destination list in which specific cloud services (Microsoft 365, Windows Update, Google-related services) are defined is automatically distributed from Yamaha-managed servers free of charge on a regular basis, so that communication control based on the latest information is always possible without changing the settings created at the start of use. In addition, applications defined by users can also be targeted for local breakout. This realizes a stable network environment for base networks while greatly reducing the operational burden on administrators.

**Compliant with Japan's JC-STAR Level 1 Security Standard**

Certified under Japan's "Security Requirements Conformance Evaluation and Labeling System (JC-STAR)" by the Information-technology Promotion Agency (IPA), the RTX840 features a robust security architecture aligned with international best practices. It ensures long-term protection against cybersecurity threats and delivers trusted reliability for both enterprise and public-sector networks.

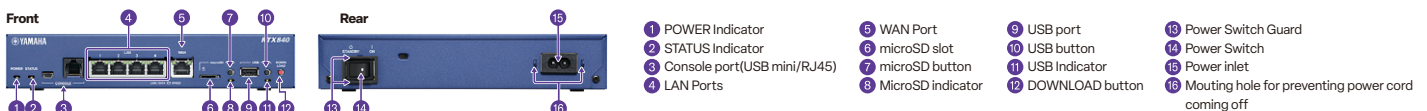


## RTX840 Specification Table

Interface	LAN/WAN Ports	LAN: 4 ports WAN: 1 port All ports support 10BASE-T / 100BASE-TX / 1000BASE-T and automatically detect straight or crossover cables. LAN ports function as a 4-port Layer 2 switch.
	microSD Slot	1 slot (SDHC compatible)
Memory	USB Port	1 port: USB 2.0 Type-A (Power supply current: up to 500 mA, supports USB memory and USB data communication devices) (*2)
	Console Port (for configuration)	2 ports: RJ-45, USB Mini-B (5-pin), 9,600 / 19,200 / 38,400 / 57,600 / 115,200 bit/s (*3)
Performance	Flash ROM	B64MB (Firmware: 1 pairs, Config: 5 pairs / History function)
	RAM	1GB
Supported lines and service networks (*1)	IPsec connection format	FTTH (OPTICAL FIBER), ADSL, CATV, ATM LINE, IP-VPN NETWORK, WIDE-AREA ETHERNET NETWORK
	IPV6 connection format	Native, Tunnel, DHCP, PPPoE
Routing	Routed Protocols	IPV4, IPV6
	IPV4 Routing Protocols	RIP, RIP2, OSPF, BGP4(EBGP, IBGP)
Data Compression	IPV6 Routing Protocols	RIPng, OSPFv3
	Number of route entries	10,000 (*4)
Throughput	OSPF Neighbor Count	30 (*4)
	Number of OSPF routes	Total when connected to 10 neighbors or less: 10,000, Total when connected to 30 neighbors: 8,000
VPN Locations	BGP4 Peer Count	32
	Number of BGP4 routes	10,000 (*4)
VPN function	Throughput	CCP(StacLZS), VJC
	IPsec Throughput	Max 2.0 Gbit/s (*5)
NAT	sum	Max 1.0Gbit/s (*6)
	IPsec	20 (*7)
QoS	L2TP/IPsec	20
	L2TPv3	1
Security	PPTP	4
	Multipoint Tunnel	20
Backup	IPsec (VPN function: NAT traversal, XAUTH) + AES128/256, 3DES, DES (encryption function: hardware processing) + IKEv1 (main mode, aggressive mode) / IKEv2, IKEv2 / IPsec remote access (PSK) (*8), PPTP (VPN function) + RC4 (encryption function) (*9), L2TP/IPsec, L2TPv3, L2TPv3/IPsec, IPsec, IPsec tunnel, Multipoint tunnel (server/client), IPsec route auto-add function	
	NAT	NAT, IP Masquerading, Static NAT, Static IP Masquerading, DMZ Host Function, PPTP Passthrough (Multiple Sessions (*10)), IPsec Passthrough (1 Session), FTP Support, Traceroute Support, Ping Support, IP Masquerading Conversion Session Limit, Port Saving IP Masquerading, Hairpin NAT
Management/Settings	QoS function (control method)	Priority control, Bandwidth control(Dynamic Traffic Control), Dynamic Class Control, Tunnel QoS, Bandwidth detection, Load notification
	QoS function (classification method)	IP address, protocol, port number, ToS field
Other features	QoS function (linkage with network-side QoS function)	Diffserv, Coloring (ToS), ToS → CoS conversion
	Authentication Function	RADIUS, PAP/CHAP, MS-CHAP/MS-CHAPv2
Extensions	Security Features	URL filter (internal database lookup type), DHCP terminal authentication function, Winny filter (Winny Version 2 compatible), Share filter (Share version 1.0 EX2 compatible), MAC address filter
	Firewall function (IPv4/IPv6 static filtering)	IP Address, Port, Protocol (Established, with TCP flag), FQDN, Source/Destination, Applies to LAN/WAN side IN/OUT
Hardware	Firewall function (IPv4/IPv6 dynamic filtering)	BASIC APPLICATION (TCP, UDP), APPLICATION APPLICATION (FTP, TFTP, DNS, WWW, SMTP, POP3, TELNET), FREE DEFINITION, APPLIES TO IN/OUT ON LAN/WAN SIDE
	Number of Dynamic Filter Sessions	150,000
Safety Precautions	Firewall function (IDS: IPv4 unauthorized access detection)	Applies to IN/OUT on LAN side/WAN side, IP header, IP option header, 41 types of unauthorized access can be detected in categories such as ICMP/UDP/TCP/FTP, unauthorized access detection email notification function
	Backup function	VRRP, Floating Static, Network Path Backup, LAN/PP/Tunnel Interface Backup, Wireless WAN Backup, Backup Email Notification
Contact Detail	IP keepalive ground count	100 (*11)
	Statistical management functions	Dashboard functions (system information, resource information, interface information, traffic information, provider connection status, VPN connection status, YNO agent operation status, number of NAT sessions, number of fastpath flows, number of dynamic filter sessions, keyword check statistics of URL, unauthorized access detection history, SYSLOG)
Names of Each part	THERE	YNO Agent Function, GUI Forwarder, Zero Config, LAS
	LAN management	L2MS Manager (*12), VLAN Batch Configuration, Snapshot Function, Redundant LAN Cable, LAN Map, List Map
Safety Precautions	SNMP	SNMP(v1, v2c, v3)
	Logging Capabilities	Storage in memory, Output by SYSLOG, Output to external memory (microSD, USB memory) (with encryption function), Log saving when the power switch is turned off (power-off log saving function), Reboot log saving function
Safety Precautions	Log Storage Capacity	Up to 10,000 rows
	Means of setting	Console, TELNET server (multiplexed), TELNET client, SSH server (multiplexed), SSH client, Web GUI (custom GUI compatible), Configuration via external memory (microSD, USB memory), Download/upload via TFTP/SFTP/SCP, Remote setup via Data Connect
Safety Precautions	Recommended browsers for GUIs (*13)	-Windows: Microsoft Edge, Google Chrome, Mozilla Firefox -macOS: Safari -iPadOS: Safari
	Other features	DHCP SERVER, DHCP CLIENT, DHCP RELAY AGENT, DNS RECURSIVE SERVER, DNS SERVER SELECTION FUNCTION, CIDR, PROXY ARP, SNTP SERVER, NTP CLIENT, LAN SECONDARY ADDRESS SETTING, FILTERED ROUTING, LOOPBACK/NULL INTERFACE, PACKET FORWARDING FILTER, MULTIHOMING, Scheduling function, Survival notification function, Netvoluntary DNS service support (*14), UPnP support, Wake on LAN support, NAT46/DNS46 function
Safety Precautions	Extensions	Lua Scripts
	SIP connection function	Number of data connects:6
Safety Precautions	Status indicator	Front: 14(POWER, ALARM, STATUS, LAN [LINK / SPEED×4] , WAN [LINK / DATA SPEED] , microSD, USB, Back: 0
	Operating environment conditions	Ambient temperature 0 to 50°C, ambient humidity 15 to 80% (non-condensing)
Safety Precautions	Power	AC100-240V(50/60Hz), Built-in power supply, Power inlet (2-pole connector, C8 type), Power switch
	Maximum consumption power (picophase power), maximum consumption current, heat consumption	12W(24VA), 0.24A, 43.2kJ/h
Safety Precautions	Energy-saving features	Energy Efficient Ethernet (EEE), shutting down unused LAN ports and SFP+ slots, shutting down microSD slots/USB ports
	Case	Metal housing, Cooling fans: 2
Safety Precautions	Radio wave barrier specifications, environmental load substance management	VCCI Class A, RoHS supported
	External dimensions	220(W)×43.5(H)×160(D)mm (Protrusions not included)
Safety Precautions	Weight (not including accessories)	1.1kg
	Accessory	Power cord, Power cord relief bracket, Read before you begin (including warranty card), Rubber feet, Dust cover (factory installed, installed in SFP+ slot)
Safety Precautions	Default IP address	192.168.100.1

(\*1) To connect to lines such as ADSL, CATV, or FTTH (fiber optic), a separate ADSL modem, cable modem, or media converter may be required. In addition, some internet service providers may not allow simultaneous use by multiple computers, so please check with your service provider. (\*2) Operation of all USB memory devices is not guaranteed. USB hubs cannot be used. The list of USB data communication devices confirmed to work is available on the technical information website. (\*3) Please use a commercially available USB Mini-B cable. (\*4) The values indicated are the maximum values confirmed by Yamaha through testing. (\*5) Throughput values are measured based on RFC2544 (without NAT, without filters, with multiple bidirectional flows processed by multi-core). (\*6) The values when using AES+SHA1 are measured with multiple bidirectional flows processed by multi-core. (\*7) The total upper limit applies when multiple types of VPNs are used simultaneously. (\*8) Only remote access connections from Android, iOS, and iPadOS are supported. (\*9) This product uses "RC4." RC4 is a registered trademark of RSA Security LLC in the United States and other countries. (\*10) For PPTP clients, multiple sessions are supported. The PPTP server supports only one session. (\*11) Applicable number of destinations when using the IP keepalive function for monitoring only, without combining VPN or network backup functions. (\*12) L2MS (Layer 2 Management Service) is a function that manages Yamaha network devices at Layer 2 level. Compatible L2MS agent models are listed on the Technical Information (RTpro) website. (\*13) It is recommended to use the latest version of your browser. The latest information about supported web browsers is available on the Technical Information (RTpro) website. (\*14) In Internet environments using private IP addresses such as "10.x.x.x," "172.16.x.x-172.31.x.x," or "192.168.x.x" (e.g., CATV), the NetVolante DNS service cannot be used.

### Names of Each part



**Safety Precautions** Before installing or using this product, please be sure to carefully read and follow the precautions and prohibitions described in the instruction manual.

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### Contact Detail



Yamaha Corporation

10-1 Nakazawa-cho, Chuo-ku, Hamamatsu-shi,  
Shizuoka 430-8650, Japan