



Higuard series Version 9.0.3.1

[Version History]

v9.0.2.4_2024/01/18

v9.0.3_2025/02/18

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Available firmware : 9.0.3((747c9c93a76c1e8bc606badeb9f47de61ed4c359/

d8226ba551632f4d639233a6a92a66b882510fdf

4d83561be4993e9857fc1d3868dd0392bc0ceaa8)



HASH

md5 : dc024e3aeb42799ee27cb838dd26aab2

sha1 : bce55047ef05a5ba32fbe92ce34ac5ba5eeac922

sha256 : 0a5c69baab3e5fe90b04614c3fbc899ef4dab76736426ec6ee1aebae66202226

Installation instruction

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- After the update is installed, the system will automatically restart twice. Please wait 3-5 minutes

Function Specification Description

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- [Status > Dashboard] requires a valid license to be activated.
- [Services > Anti-Virus Engine > Kaspersky Engine] requires a valid license to be activated.

Upgrade Notes

[Configuration]

[Basic Setting]

- Adjustments
 - ◆ [Administrative Access] > Security

TLSv1.1 is disabled by default in factory settings.

[Administration]

- Adjustments



- ◆ Hide unnecessary options under [Account Security Settings] when "Custom the Rules of Password" or "Passwordless Authentication Settings" are disabled.

- ◆ [Clear Data] > *WEB Log*

HTTPS connection logs are now included in data retention.

- Bug Fixes

- ◆ Fixed an issue where a **blank prompt/message** appeared after editing settings in [Administration] under certain conditions.

- ◆ Fixed an issue where **USB Log Backup** could not **mount backup data** in [Clear Data] under certain conditions

- ◆ Fixed an issue where data was **not backed up correctly** when using **USB Log Backup** in [Clear Data] under certain conditions.

[Upgrade]



- Adjustments
 - ◆ [Firmware Message] Added interface prompts and execution restrictions during updates to prevent **duplicate** update operations.
- Bug Fixes
 - ◆ Fixed an issue where, in certain environments, update information could not be retrieved due to **restricted** connection protocols.

[Backup & Restore]

- Adjustments
 - ◆ [Keep Interface Settings] Added information about the retained settings.

[Notification]



- Bug Fixes

- ◆ Fixed an issue where the operation log displayed incorrect information when saving without changing the "Notification Email Subject".
- ◆ Fixed an issue where data could not be retrieved in [Log] > " Log Source" when the data source included USB backup data.
- ◆ Fixed an issue where notification emails for [Notification] > "Virus Engine Abnormal Notification" were missing a subject line.

[Reboot & Power Off]

- Bug Fixes

- ◆ Fixed an issue where the system schedule did not execute properly in some cases after enabling [Auto Reboot]

[AP Management]



- **Adjustments**

- ◆ [AP Management] > Add/Edit > Model.

The model selection menu is now categorized by vendor/brand.

- ◆ Removed support for the following AP models: AP-300, Howay2000NI, NWA1100-NH.

- **Bug Fixes**

- ◆ Fixed an issue in [AP Management] > [Add/Edit] where information could not be updated and settings failed to be deployed when Telnet was selected as the " Advanced Command".

[Signature Update]

- **Bug Fixes**

- ◆ Fixed an issue where signature import could fail in some cases.



- ◆ Fixed an issue where "Auto Update" could fail in some cases.

[SSL Certificate Settings]

- Adjustments
 - ◆ Updated the interface to display an expiration notice when the TXT record for Let's Encrypt certificate validation has expired
 - ◆ Updated "Manual Input" > "Website Name" to support the "*" wildcard.

[Uninterruptible Power System]

- Adjustments
 - ◆ Improved page loading performance in [Uninterruptible Power System] under certain conditions
- Bug Fixes



- Fixed an issue where [Uninterruptible Power System] did not shut down the system according to the configured settings.

[Network]

[Interface]

- **Adjustments**
 - ◆ Updated the system to display a notification based on the settings in [Service> DHCP > DHCP Server] when changing the interface subnet.

[Route]

- **Adjustments**
 - ◆ [Dynamic Routing] Added support for VLAN, IP Tunnel, and ZTA VPN Site-to-Site interfaces. (ZTA VPN Site-to-



Site supports IPv4 only.)

- **Bug Fixes**

- ◆ Fixed an issue in **[Static Routing]** where the "Dst IP " field appeared blank in some cases when a WWAN interface was used as the default gateway.
- ◆ Fixed an issue in **[IPv6] > [Designated Gateway Group]** where changes to **[Designated Gateway]** settings were not synchronized in some cases, causing abnormal behavior.
- ◆ Fixed an issue in **[IPv6] > [Designated Gateway] > [Edit]** where settings were not synchronized when an applied rule was modified, causing abnormal behavior.
- ◆ Fixed an issue in **[IPv6] > [Designated Gateway]** where connections could only be routed through the same WAN interface in some cases.
- ◆ Fixed an issue in **[Default Gateway]** where Internet connectivity could take some time to become available after



the device booted up.

[Designated Gateway]

- Bug Fixes
 - ◆ Fixed an issue in **[Edit]** where changes could not be saved when only the "**Comment**" or "**Visit Control**" setting was modified for a VLAN with DHCP enabled.
 - ◆ Fixed an issue in **[Edit]** where saving a VLAN with DHCP enabled without making any changes could cause the DHCP service to malfunction.

[WWAN Dial-Up]

- Add
 - ◆ Added support for the **D-Link DWM-222W (1286:4e31)** network adapter.



- Bug Fixes

- ◆ Fixed an issue where disabling manual settings was not applied correctly, causing the WWAN dial-up connection to fail.

[Interrupt]

- Adjustments

- ◆ [Software Interrupt] When PPPoE is enabled on an interface, the **software interrupt setting** for that interface will be **automatically enabled**.

- Bug Fixes

- ◆ Fixed [Hardware Interrupt] to hide unnecessary interface names

[Policy]



[Security Policy]

- **Add**
 - ◆ Added a feature to search for rule IDs under "Search Rule" > "Define"
- **Adjustments**
 - ◆ Added a tool tip in the rule list for PPPoE interfaces to display the current IP address.
- **Bug Fixes**
 - ◆ Fixed an issue where the menu content under [Add/Edit] > Source Interface / Assign Gateway displayed abnormally in certain situations.
 - ◆ Fixed an issue where Firewall Protection could fail to block traffic properly in some cases when IPS and Firewall Protection were enabled simultaneously.
 - ◆ Fixed an issue where information in [Mapped IP/Port Overview] was displayed incorrectly in some cases.



- ◆ Fixed an issue where searching for "NAT" under "Search Rule" > "Define" could return incorrect results in some cases.
- ◆ Fixed an issue in [SYN Protection] where the "NAT" tooltip displayed incomplete information in some cases.
- ◆ Fixed an issue in [SYN Protection] > " Search Rule" where clicking " Search Rule" had no response.
- ◆ Fixed an issue where statistics for " Max. Quota" > " Count by day" were calculated incorrectly.
- ◆ Fixed an issue in [IPv6] > [Imcoming] > [Add/Edit] where "Server Load Balance" under " Network Address Translation " did not function properly.
- ◆ Fixed an issue where the tooltip did not display the IP address correctly when "Assign Gateway" was set to WWAN in the rule list.
- ◆ Fixed an issue where the connection status of SSL VPN accounts under "Source /Destination" in the rule list was displayed incorrectly in some cases.



[IPSec Policy]

- Bug Fixes
 - ◆ Fixed an issue in [Edit] where the "Source" was displayed incorrectly in some cases.

[SD-WAN Policy]

- Bug Fixes
 - ◆ Fixed an issue where the "SD-WAN" tooltip information in the rule list did not match the actual settings.

[Object]

[IP Address]

- Bug Fixes
 - ◆ Fixed an issue in [**IP Address List**] > [Add/Edit] where "Get MAC" could not retrieve the MAC address



correctly when "Configuration Method" was set to "IP and MAC Address".

- ◆ Fixed an issue where entries in the [**IP Address List**] were not displayed in the order they were added when no sorting option was specified.
- ◆ Fixed an issue in [**IP Address List**] > [Add/Edit] where the settings could not be saved when "Configuration Method" was set to " List of External URLs" and the URL contained an IPv6 address.

[Application Control]

- Bug Fixes
 - ◆ Changed "Application Version" to "Service Version" and added "Signature Version" information

[URL Filter]

- Bug Fixes



- ◆ Fixed an issue where [List Settings] did not block traffic according to the configured settings in some cases.

[Firewall Protection]

- Adjustments

- ◆ Adjusted the default value for the maximum number of queries allowed per source IP address to 20 under [Firewall Protection] > "DNS Attack Detection Setting"

- Bug Fixes

- ◆ Fixed an issue where settings under [Firewall Protection] > IP address block / IP address exception were not saved correctly when many entries were configured.
- ◆ Fixed an issue where blocking actions under [Firewall Protection] were not executed correctly under certain conditions.

[Authentication]



- **New Features**

- ◆ Added configuration options related to [LDAP].

- **Bug Fixes**

- ◆ Fixed an issue where incorrect account length restrictions on certain login interfaces prevented users from logging in.
- ◆ Fixed an issue in [AD Users] where complete data could not be retrieved in some cases.
- ◆ Fixed an issue where the web authentication login page was not displayed properly in some cases.
- ◆ Fixed an issue in [Page Settings] where the new logo was not displayed in "Logged-in Preview" after using "Upload Logo".
- ◆ Fixed an issue in [Local User] where users could not change their passwords on the ZTA VPN login page when both "Require Password Change at Next Login" and "2-Step Verification" were enabled.



- ◆ Fixed an issue in [AD Users] > [AD Accounts Synchronous Missing] where related feature settings were not properly synchronized when deleting accounts.
- ◆ Fixed an issue in [User Group] > "Edit" where no warning message was displayed when configuration conflicts occurred.
- ◆ Fixed an issue in [User Group] where data was displayed incorrectly when users selected AD-related options.
- ◆ Fixed an issue in [User Group] > [Add/Edit] where IPv6 login failures were not handled according to the "Temporarily block after exceeding login failure limit" setting when "User defined setting" was enabled.

[Services]

[DHCP]

- Bug Fixes
 - ◆ Fixed an issue in [DHCP Server] where settings could not be saved when the "IP Range" field was left blank



for a VLAN interface

- ◆ Fixed an issue in [IPv6] where disabling DHCPv6 could cause service abnormalities in some cases.
- ◆ Fixed an issue where pages failed to load properly in some cases.

[DDNS]

- **Bug Fixes**

- Fixed an issue where the update results for changeip.org were displayed incorrectly in "Log".

[Anti-Virus Engine]

- **Adjustments**

- ◆ [ClamAV Engine] Updated to version 1.0.9.
 - ◆ [Kaspersky Engine] Updated to version 8.10.1.



[Sandstorm]

- **Adjustments**
 - ◆ Updated [Cloud Test] to support querying items in the AI database.
- **Bug Fixes**
 - ◆ Fixed an issue where signature updates repeatedly failed in some cases.

[WEB Service]

- **Adjustments**
 - ◆ Optimized query and export performance in [HTTPS Log] when handling large amounts of data.
- **Bug Fixes**
 - ◆ Fixed an issue where certain websites became inaccessible after enabling the service.
 - ◆ Fixed an issue in " Import SSL Certificate" where previously visited IPv6 addresses were repeatedly redirected



to the certificate installation page.

[High Availability]

- **Bug Fixes**
 - ◆ Fixed an issue where certain services continued running while the Backup device was in standby mode.
 - ◆ Fixed an issue where the network interface status indicators under [Home] > "Interfaces" were displayed incorrectly in some cases while the Backup device was in standby mode.
 - ◆ Fixed an issue where the [Configuration] > [Data Items] setting was not synchronized properly.

[Remote Syslog]

- **Adjustments**
 - ◆ Added support for configuring multiple server IP addresses in [Remote Syslog].



[Advanced Protection]

[Anomaly IP Analysis]

- Bug Fixes
 - ◆ Fixed an issue in [Abnormal Logs] where query results were incorrect in some cases.

[Switch]

- Bug Fixes
 - ◆ Fixed an issue where SNMP Write connection tests under [Switch Setup] [Add/Edit] behaved abnormally under certain conditions.
 - ◆ Fixed an issue in [Switch Setup] > [Add/Edit] where the port count of the selected model was not automatically updated when switching brands.



- ◆ Fixed an issue in [Switch Status] where the port order displayed for certain models did not match the actual physical port arrangement.
- ◆ Fixed an issue where [Switch Status] was not displayed properly in some cases.
- ◆ Fixed an issue in [Schedule Setup] > "Edit" where "Manage Port" information was not displayed correctly in some cases.
- ◆ Fixed an issue where invalid feature interfaces or buttons were not properly hidden in some cases.

[Intranet Protection]

- **Bug Fixes**

- ◆ Fixed an issue where IP addresses configured as "Trusted IP Addresses" under [Spoofing Setup] > ARP Threshold Value still appeared in protection logs under certain conditions.
- ◆ Fixed an issue where incorrect "Abnormal Packet Transmission Volume" records appeared in [IP Collision



Log] under certain conditions.

[IPS]

[IPS Setting]

- Adjustments

- ◆ Optimized page loading performance in [IPS Notification Item].

- Bug Fixes

- ◆ Fixed an issue in [IPS Filter Setting] > [Add/Edit] where deselecting items did not take effect in some cases.

[Content Record]

[WEB Record]

- Bug Fixes



- ◆ Fixed an issue where duplicate data or incorrect query results occurred in some cases.

[VPN]

[IPSec Tunnel]

- Add

- ◆ Added support for the AES128GCM16 algorithm in IKEv2.

- Bug Fixes

- ◆ Fixed an issue where changes to the IP address were not synchronized correctly when “IP Address” was configured to use the WWAN interface.
- ◆ Fixed an issue in [Auto VPN Client] where the list background color was displayed incorrectly in some cases.
- ◆ Fixed an issue where packets could not be transmitted properly in some cases, causing connection issues.



[PPTP Server]

- Adjustments
 - ◆ Added support for the "#" character in usernames and passwords.

[PPTP Client]

- Adjustments
 - ◆ Added support for the "#" character in usernames and passwords.

[SSLVPN Server]

- Bug Fixes
 - ◆ Fixed an issue in [SSLVPN Setup] where WWAN interfaces were displayed incorrectly under "Local Interface" and "Client Linking Setting".



- ◆ Fixed an issue in [SSLVPN Setup] > "Push Route" where unexpected items appeared in the IPsec dropdown menu.
- ◆ Fixed an issue where the client software failed to establish a connection in some cases.

[L2TP]

- Adjustments
 - ◆ Added support for the "#" character in usernames and passwords.

[SD-WAN]

- Adjustments
 - ◆ Added prompts and restrictions to prevent connection failures when multiple IPsec tunnels use different IKE versions.



- Bug Fixes

- ◆ Fixed an issue where packets were not forwarded correctly, resulting in connection abnormalities under certain conditions.
- ◆ Fixed an issue in [Add/Edit] where unexpected warning messages appeared when saving settings in some cases.

[ZTA VPN]

[Client-to-Site]

- Add

- ◆ Added support for the "Auto Connect" feature in [Client Software].

- Bug Fixes

- ◆ Fixed an issue in [ZTA VPN Settings] where WWAN interfaces were displayed incorrectly under "Local



Interface" and "Client Connection Settings"

- ◆ Fixed an issue where abnormal options appeared in the IPSec selection menu under [ZTA VPN Setup] > Push Route.
- ◆ Fixed an issue in [Client List] > "User Static IP Address" where a previously assigned static IP address remained unavailable to other accounts after the setting was deleted
- ◆ Fixed an issue in [Connection Log] where partial matching could not be used for IP address searches in some cases.
- ◆ Fixed an issue where access control rule settings interfered with connection detection in some cases.

[Log]

[System Operation]

- Add



- ◆ Added log records for shutdown operations under [System Settings] > [Uninterruptible Power System].
- Bug Fixes
 - ◆ Fixed an issue where no logs were recorded for [Configuration] > [Administrator] > [USB Log Backup].
 - ◆ Fixed an issue in [Wizard] where certain log fields were displayed incorrectly.

[Logs Search]

- Bug Fixes
 - ◆ Fixed an issue where certain feature items were missing in [Logs Search].

[Status]

[Connection Status]

- Adjustments



- ◆ Updated [Device List] to reference the "MAC Address" field in the Address Table for member names.
- Bug Fixes
 - ◆ Fixed an issue in [Device List] where information in the "Alias" field was displayed incorrectly.

[Flow Analysis]

- Bug Fixes
 - ◆ Fixed an issue in [IPv6] > [Flow Rank Search] where query results could not be displayed in some cases.
 - ◆ Fixed an issue in [IPv6] > [Flow Rank Search] where the "Log Source" option was missing from the search criteria.

[Dashboard]

- Bug Fixes



- ◆ Fixed an issue in [Flow Analysis] > "Application Traffic" where application names containing special characters were displayed incorrectly.

[Others]

[Management Interface]

- New Features

- ◆ [ZTA VPN] > [Site-to-Site] Added configuration options to support **VPN tunnel connections between devices.**

- Bug Fixes

- ◆ Fixed an issue where the list did not return to the correct page after adding, editing, or deleting settings on certain feature pages.
- ◆ Fixed an issue in [Home] where the traffic chart was not displayed properly in certain browser versions.



- ◆ Fixed issues with incorrect or incomplete translations in certain languages.

[System]

- Bug Fixes

- ◆ Fixed an issue where the Application Control could cause system crashes under certain conditions.
- ◆ Fixed an issue where input was not properly validated on certain interfaces, potentially causing security vulnerabilities.