Radio Modem WiFi 6 HG G-76354-A (5G)

Changelog Firmware Versions 3.14i -> 3.14t



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The Götting KG in D-31275 Lehrte has a certified quality management system according to ISO 9001.





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Firmware Changelog

Below you find a list of the firmware versions released to date with the changes made in each case.

1.1 Firmware 3.14i -> 3.14k (16.05.2023)

Functional changes:

- 1. The relay is now controllable via REST API and using statement sequences.
- 2. Authentication of individual API/URLs: This makes it possible to secure access to specific API functions with a separate user/password without having to use the user/password for device configuration.
- 3. 5G/LTE: Firmware update support for RM520N-GL

Bugfix:

- 1. Segfault error in the MQTT function fixed (TLS-Write).
- 2. Segfault error in the timer module fixed (Blacklist + ConfigChange)

1.2 Firmware 3.14k -> 3.14m (14.06.2023)

Security updates:

Change of Linux kernel version from 6.1.23 → 6.1.33

Functional changes:

- 1. wpa_supplicant updated to 2.11-dev (Git Rev. 95C3f0d1)
- 2. Improvement in relay control via REST API: Erroneous sequences and relay commands are now rejected with HTTP Error 400.
- 3. Output a warning in the debug log if all matching SSIDs are evaluated with 0 during the score calculation. This indicates that one of the crypto settings does not fit.
- 4. Warning in debug log after startup if certificates (client and CA certificates) are loaded that are about to expire or have already expired.

1.3 Firmware 3.14m -> 3.14n (14.07.2023)

Security updates:

Change Linux kernel version from 6.1.33 → 6.1.36

Functional changes:

- 1. Web server security:
 - Preferences for the TLS session handshake algorithms can now be set.
 - New option Send HSTS header _



- 2. EAP: EAP-TTLS can now also be performed without certificates. (similar to EAP-PEAP)
- 3. Wireless: wpa_supplicant now with 802.11v support.
- 4. Wireless: now shows in the AP list whether an access point supports 802.11v.
- 5. Serial: The serial interface can now also communicate via TLS. Certificates for authentication can also be installed for this purpose
- 6. Bridge/NAT: now with warnings for conflicts of local services of the device with NAT rules defined by setup.
- 7. MQTT Bridge: Now also with local web socket port (default 8080)

Bugfix:

- 1. Serial: Approx. 1.5KB of memory were not released on each TCP reconnect.
- WLAN dump: If a filter was set in LAN client cloning to record only its own traffic, then the correct MAC was not taken to define the filter.

1.4 Firmware 3.14n -> 3.14o (25.08.2023)

Security updates:

Change Linux kernel version from 6.1.36 \rightarrow 6.1.44

Functional changes:

- 1. SYN flood detection increased to 40 SYN burst. On average 5 SYN / second is still ok.
- 2. SNMP: Addition of status values from the info of /proc/net/dev
- 3. Improvement for IPv6 bridging
- 4. SCEP: If the CA Identity parameter for the URL contains illegal characters the value is URL-Encoded
- 5. Display of additional warnings in MCConfig (from Vers.: 2_0_3_9) in the column "Status":
 - For certificates that are about to expire or have already expired.
 - For incorrectly configured ping test.
- 6. After a "reset to defaults" of the config via the web interface or also when uploading a configuration, the view automatically changes to the configuration web page after 2 seconds.

Bugfix:

- 1. the AuxIn is now processed correctly
- 2. The USB voltage is now switched on earlier, so that an inserted USB memory can be detected early. Thus the Config-Stick detection works now also reliably.
- 3. Correction when uploading a configuration via the web interface: The passwords are now processed correctly



1.5 Firmware 3.140 -> 3.14p (18.10.2023)

Security updates:

- 1. Change Linux kernel version from 6.1.44 \rightarrow 6.1.51
- 2. Buildroot: Move to OpenSSL 3 (OpenSSL 3.0.11 19 Sep 2023).

Functional changes:

- 1. input status: the status is displayed on the web page (Home) and can be queried via the API.
- 2. API/Status/Wireless.Connection Information for LANCloning adapted.
- 3. new element "Encryption" in "/API/Status/Wireless/Accesspoints/xx".

1.6 Firmware 3.14p -> 3.14r (10.01.2024)

Security updates:

- 1. Update of the Linux kernel version from $6.1.51 \rightarrow 6.1.70$
- 2. OpenSSL update to version: 3.1.4

Functional changes:

- 1. SCEP: Challange variant now also possible with V_ASN1_UTF8STRING.
- 2. SCEP: RFC 5652: Cryptographic Message Syntax (CMS) implemented
- 3. WLAN-Dump: new option for selecting what is to be recorded:
 - moni $0 \rightarrow$ (Wireless Header)
 - wlan0 \rightarrow (Ethernet Header)
- 4. DNS forwarding: now with active handling instead of simple forwarding.
- 5. The Network Test website now also supports IPv6
- 6. Pseudo Level2 Bridge Mode: the client IP is now also "learned" from received ARP packets.
- 7. Reverse lookup of the host name via WLAN IP is now possible
- 8. MQTT Client + Serial can communicate via IPv6.
- 9. VPN: IPSec extended and WireGuard® added

1.7 Firmware 3.14r --> 3.14s (19.03.2024)

Security updates:

- 1. Update of the Linux kernel version from $6.1.70 \rightarrow 6.1.81$
- 2. OpenSSL update to version: 3.2.1 (30 Jan 2024)

Functional changes:

- 1. implemented EST as an additional method for certificate distribution and updating
- 2. ping test: Adjustable parameter "Short Interval", which defines the shortened ping interval after an AP change.
- 3. update for the WPA supplicant



4. MQTT client: Server Name Indicator (SNI) added for TLS connections.

Bugfix:

1. deleting all dump and log files could cause the firmware to crash

1.8 Firmware 3.14s --> 3.14t (10.04.2024)

Functional changes:

- 1. Display of Captive Portal if the DHCP client was supplied with option 114 by the DHCP server.
- 2. LTE/5G: Service domain can be set (CS&PS, CS, PS)

Bugfix:

- Roaming/Score: Bugfix for TPC rating for APs transmitting on 5GHz channels >= 128. Under certain circumstances it could happen that APs with low SNR value were rated higher than APs with a higher SNR.
- 2. Login form with background blocking (CDC) After more than 5 seconds, it was no longer possible to log in with read-only users.



2

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