

ADVANTECH



Firmware 6.3.8

RELEASE NOTES

Abstract

This document describes:

- Firmware update instructions.
- Description of all new features, fixes, and other changes implemented in the firmware.
- Known issues related to a firmware version

Firmware Details

- **Firmware version:** 6.3.8
- **Release date:** December 2, 2022
- **Compatibility:** Advantech routers; see the [Firmware Distribution Overview](#)

Please note that not all new Advantech routers are produced and shipped with the latest release of the firmware. The reason for this is usually an existing certification valid for a specific carrier or a region. For more information about the latest version of the firmware for your router, see the *Firmware Distribution Overview* document.



For current and detailed information about the router configuration see the latest version of the [Configuration Manual](#) for your router.

Product-related documents and applications including the firmware can be obtained on *Engineering Portal* at icr.advantech.cz address.

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Part I

Firmware Update Instructions

General Update Instructions and Notices

HTTPS certificates: The HTTPS certificate format in the router was updated in FW 5.3.5 to improve the security. Existing HTTPS certificates on previously manufactured routers will not automatically be updated with the firmware update! It is possible to update the HTTPS certificates by deleting the files within `/etc/certs/https*` in the router (e.g. via SSH). The certificates will be re-created automatically during the router's next start.

Specific Update Instructions

New filename: If the firmware filename for your router was changed, as listed in Table 1, you will get an issue during the manual or automatic firmware update. The following warning message will appear: *You are trying to upload file "xx.bin" but "yy.bin" is expected. Are you sure to continue?*

To go ahead with the **manual** firmware update, check the table below for details about recent firmware filename changes and make sure you have the correct firmware file for your router. Now, you can confirm the displayed warning message.

To go ahead with the **automatic** firmware update, rename the new firmware file (*.bin and *.ver) to the filename valid before the filename change. This should allow the router to pass through the process of automatic firmware update. Next time, the automatic firmware update feature will work as expected with no need to rename the file.

Router model	FW ver.	New filename	Original filename
SmartMotion ST352 SmartMotion ST355	6.0.2	SPECTRE-v3T-LTE.bin	BIVIAS-v3LL.bin
SmartStart SL302	6.0.3	SPECTRE-v3L-LTE-US.bin	SPECTRE-v3L-LTE-AT.bin

Table 1: Recent Firmware Filename Changes

Updating Firmware Version Earlier than 5.3.0



It is necessary to follow specific update instructions below only if you are updating from firmware older than 5.3.0.

Due to a bug in the firewall (now fixed) when a WAN device is part of a bridged interface, caution should be taken when updating in the following case:

Condition: When a WAN device is part of a bridged interface, access to that WAN device (HTTPS, SSH) is always granted regardless of configuration.

Problem: If this is your configuration, it is highly likely that you are not aware of this, so the undesired effect of the bridge firewall fix may make the router inaccessible.

Recommended Action: Enable access to both, the web and ssh services, before updating if you want to keep the current behavior (access to the WAN interface). This can be done on the *NAT* page in the *Configuration* section of the router's Web interface.

Change the root's password:

It is necessary to change the password of the *root* user when updating to the firmware version 5.3.0 or newer. The reason for this is an update of the authentication system (encryption algorithm *crypt* was changed to *MD5*; passwords are now stored in the */etc/shadow* file instead of */etc/passwd* file). The change of the password is required before setting up the remote access on the *NAT Configuration* page.

Please note that when downgrading from 5.3.0+ to an earlier firmware version, the password of the *root* user is reset to the default one, which is *root*.



FirstNet Firmware Specific Updates

Note: The changes described below are valid for *FirstNet* products (**ICR-3241-1ND** and **ICR-3241W-1ND**) only and have been made in firmware version 6.3.2 unless otherwise noted.

- **Administration User Account** – The *root* user is disabled for web or SSH logins. Use the *admin* user account instead. See the router label for a unique password.
- **Disabled User Scripts** – User scripts, which could have been configured in the GUI before, are not supported anymore. Existing scripts will be converted automatically to a Router App only during a firmware update to version 6.3.7 or higher. Note that user scripts will be deleted when the firmware is upgraded to versions 6.3.2 through 6.3.6.
- **Different Default Settings** – The router's default setting is different from the standard setting due to higher security requirements.
- **No FTP Support** – There is no FTP configuration in the GUI.
- **No Telnet Support** – There is no Telnet configuration in the GUI.
- **WiFi Security** – Configuration of WEP, WPA1, and WPA2-TKIP WiFi security protocols are not available.
- **HTTP Restrictions** – Only HTTPs access can be configured. The minimal configurable TLS (Transport Layer Security) is TLS 1.2.
- **MTU Settings** – The MTU (Maximum Transmission Unit) is configured to 1342 bytes.
- **SNMP Restrictions** – SNMP write access is disabled.
- **FirstNet Router App Changes** – Some features implemented in the *FirstNet* Router App are now supported by the router firmware. The *FirstNet* Router App is dedicated to reviewing the required security status of *FirstNet* routers.

Part II

Changelog



Legend: Affected products are marked as shown below for every changelog item:

Affected product Not affected product

WiFi SNMP Enhancement

SPECTRE 3G SPECTRE RT SPECTRE LTE-AT SPECTRE LTE-VZ
ER75i v2 UR5i v2 XR5i v2 LR77 v2 CR10 v2 UR5i v2L RR75i v2 LR77 v2L XR5i v2E
Bivias v2HC Bivias v2LC Bivias v2LL Bivias v2LH Bivias v2HH
SmartFlex SR300 SmartFlex SR303 SmartFlex SR304 SmartFlex SR305 SmartFlex SR306 SmartFlex SR307
SmartFlex SR308 SmartFlex SR309 SmartFlex SR310 SmartStart SL302 SmartStart SL304 SmartStart SL305
SmartStart SL306 SmartMotion ST352 SmartMotion ST355 ICR-320x ICR-321x ICR-323x ICR-324x
ICR-203x ICR-204x ICR-241x ICR-243x ICR-244x ICR-253x ICR-263x ICR-270x ICR-273x ICR-283x
ICR-383x ICR-440x ICR-443x ICR-445x

SNMP information, subtree 1.3.6.1.2.1.2 (ifEntry), now supports all these types of WiFi interfaces: wlan0 (Access Point #1), wlan02 (Access Point #2), wlan1 (Station #1), wlan2 (Access Point #3), wlan22 (Access Point #4) and wlan3 (Station #2).

Switch SNMP Enhancement

SPECTRE 3G SPECTRE RT SPECTRE LTE-AT SPECTRE LTE-VZ
ER75i v2 UR5i v2 XR5i v2 LR77 v2 CR10 v2 UR5i v2L RR75i v2 LR77 v2L XR5i v2E
Bivias v2HC Bivias v2LC Bivias v2LL Bivias v2LH Bivias v2HH
SmartFlex SR300 SmartFlex SR303 SmartFlex SR304 SmartFlex SR305 SmartFlex SR306 SmartFlex SR307
SmartFlex SR308 SmartFlex SR309 SmartFlex SR310 SmartStart SL302 SmartStart SL304 SmartStart SL305
SmartStart SL306 SmartMotion ST352 SmartMotion ST355 ICR-320x ICR-321x ICR-323x ICR-324x
ICR-203x ICR-204x ICR-241x ICR-243x ICR-244x ICR-253x ICR-263x ICR-270x ICR-273x ICR-283x
ICR-383x ICR-440x ICR-443x ICR-445x

The status of every ethernet port of the switch interface, lan1 to lan4, is now available in the SNMP, subtree 1.3.6.1.2.1.2 (ifEntry).

Product Revision Support

SPECTRE 3G	SPECTRE RT	SPECTRE LTE-AT	SPECTRE LTE-VZ						
ER75i v2	UR5i v2	XR5i v2	LR77 v2	CR10 v2	UR5i v2L	RR75i v2	LR77 v2L	XR5i v2E	
Bivias v2HC	Bivias v2LC	Bivias v2LL	Bivias v2LH	Bivias v2HH					
SmartFlex SR300	SmartFlex SR303	SmartFlex SR304	SmartFlex SR305	SmartFlex SR306	SmartFlex SR307				
SmartFlex SR308	SmartFlex SR309	SmartFlex SR310	SmartStart SL302	SmartStart SL304	SmartStart SL305				
SmartStart SL306	SmartMotion ST352	SmartMotion ST355	ICR-320x	ICR-321x	ICR-323x	ICR-324x			
ICR-203x	ICR-204x	ICR-241x	ICR-243x	ICR-244x	ICR-253x	ICR-263x	ICR-270x	ICR-273x	ICR-283x
ICR-383x	ICR-440x	ICR-443x	ICR-445x						

A product revision is a new mechanism to distinguish between different versions of a router, whether software, hardware, or other fundamental change. There are the following new features to support the product revisions in the firmware:

- The product revision is printed in the GUI in the *Status -> General Status -> System Information -> Product Revision* section.
- The version will be printed as *Product Revision* in the `status sys` command output.
- It is available via SNMP as OID 1.3.6.1.4.1.30140.9.0.

Note: If a router has a product revision implemented, it is always printed on its label as text `Rev.x.y`, where `x` is a major and `y` is a minor revision number. For routers manufactured before the introduction of the product revision mechanism, these fields show the value as N/A.

CGI Scripts Password Validation

SPECTRE 3G	SPECTRE RT	SPECTRE LTE-AT	SPECTRE LTE-VZ						
ER75i v2	UR5i v2	XR5i v2	LR77 v2	CR10 v2	UR5i v2L	RR75i v2	LR77 v2L	XR5i v2E	
Bivias v2HC	Bivias v2LC	Bivias v2LL	Bivias v2LH	Bivias v2HH					
SmartFlex SR300	SmartFlex SR303	SmartFlex SR304	SmartFlex SR305	SmartFlex SR306	SmartFlex SR307				
SmartFlex SR308	SmartFlex SR309	SmartFlex SR310	SmartStart SL302	SmartStart SL304	SmartStart SL305				
SmartStart SL306	SmartMotion ST352	SmartMotion ST355	ICR-320x	ICR-321x	ICR-323x	ICR-324x			
ICR-203x	ICR-204x	ICR-241x	ICR-243x	ICR-244x	ICR-253x	ICR-263x	ICR-270x	ICR-273x	ICR-283x
ICR-383x	ICR-440x	ICR-443x	ICR-445x						

Due to security reasons, we have added the password check to the CGI script to ensure a user will meet all the security requirements.

Services Unprivileged Mode

SPECTRE 3G	SPECTRE RT	SPECTRE LTE-AT	SPECTRE LTE-VZ						
ER75i v2	UR5i v2	XR5i v2	LR77 v2	CR10 v2	UR5i v2L	RR75i v2	LR77 v2L	XR5i v2E	
Bivias v2HC	Bivias v2LC	Bivias v2LL	Bivias v2LH	Bivias v2HH					
SmartFlex SR300	SmartFlex SR303	SmartFlex SR304	SmartFlex SR305	SmartFlex SR306	SmartFlex SR307				
SmartFlex SR308	SmartFlex SR309	SmartFlex SR310	SmartStart SL302	SmartStart SL304	SmartStart SL305				
SmartStart SL306	SmartMotion ST352	SmartMotion ST355	ICR-320x	ICR-321x	ICR-323x	ICR-324x			
ICR-203x	ICR-204x	ICR-241x	ICR-243x	ICR-244x	ICR-253x	ICR-263x	ICR-270x	ICR-273x	ICR-283x
ICR-383x	ICR-440x	ICR-443x	ICR-445x						

Some network services now run in the unprivileged mode having restricted access to system resources. We have made this measure due to security reasons.

SMS Sending Improvement

SPECTRE 3G	SPECTRE RT	SPECTRE LTE-AT	SPECTRE LTE-VZ						
ER75i v2	UR5i v2	XR5i v2	LR77 v2	CR10 v2	UR5i v2L	RR75i v2	LR77 v2L	XR5i v2E	
Bivias v2HC	Bivias v2LC	Bivias v2LL	Bivias v2LH	Bivias v2HH					
SmartFlex SR300	SmartFlex SR303	SmartFlex SR304	SmartFlex SR305	SmartFlex SR306	SmartFlex SR307				
SmartFlex SR308	SmartFlex SR309	SmartFlex SR310	SmartStart SL302	SmartStart SL304	SmartStart SL305				
SmartStart SL306	SmartMotion ST352	SmartMotion ST355	ICR-320x	ICR-321x	ICR-323x	ICR-324x			
ICR-203x	ICR-204x	ICR-241x	ICR-243x	ICR-244x	ICR-253x	ICR-263x	ICR-270x	ICR-273x	ICR-283x
ICR-383x	ICR-440x	ICR-443x	ICR-445x						

The timeout for AT send SMS command was increased from 10 to 20 seconds to make it reliable in all the cases.

Fixed Webbing Registration

SPECTRE 3G	SPECTRE RT	SPECTRE LTE-AT	SPECTRE LTE-VZ						
ER75i v2	UR5i v2	XR5i v2	LR77 v2	CR10 v2	UR5i v2L	RR75i v2	LR77 v2L	XR5i v2E	
Bivias v2HC	Bivias v2LC	Bivias v2LL	Bivias v2LH	Bivias v2HH					
SmartFlex SR300	SmartFlex SR303	SmartFlex SR304	SmartFlex SR305	SmartFlex SR306	SmartFlex SR307				
SmartFlex SR308	SmartFlex SR309	SmartFlex SR310	SmartStart SL302	SmartStart SL304	SmartStart SL305				
SmartStart SL306	SmartMotion ST352	SmartMotion ST355	ICR-320x	ICR-321x	ICR-323x	ICR-324x			
ICR-203x	ICR-204x	ICR-241x	ICR-243x	ICR-244x	ICR-253x	ICR-263x	ICR-270x	ICR-273x	ICR-283x
ICR-383x	ICR-440x	ICR-443x	ICR-445x						

We have increased the timeout for network registration from two to five minutes to pass the network search for Webbing SIM cards successfully.

OpenSSL Security Improvement

SPECTRE 3G	SPECTRE RT	SPECTRE LTE-AT	SPECTRE LTE-VZ						
ER75i v2	UR5i v2	XR5i v2	LR77 v2	CR10 v2	UR5i v2L	RR75i v2	LR77 v2L	XR5i v2E	
Bivias v2HC	Bivias v2LC	Bivias v2LL	Bivias v2LH	Bivias v2HH					
SmartFlex SR300	SmartFlex SR303	SmartFlex SR304	SmartFlex SR305	SmartFlex SR306	SmartFlex SR307				
SmartFlex SR308	SmartFlex SR309	SmartFlex SR310	SmartStart SL302	SmartStart SL304	SmartStart SL305				
SmartStart SL306	SmartMotion ST352	SmartMotion ST355	ICR-320x	ICR-321x	ICR-323x	ICR-324x			
ICR-203x	ICR-204x	ICR-241x	ICR-243x	ICR-244x	ICR-253x	ICR-263x	ICR-270x	ICR-273x	ICR-283x
ICR-383x	ICR-440x	ICR-443x	ICR-445x						

We have disabled the weak cipher MD4 and RC4 in the OpenSSL library for security reasons.

Fixed Ethernet Issue

SPECTRE 3G SPECTRE RT SPECTRE LTE-AT SPECTRE LTE-VZ
ER75i v2 UR5i v2 XR5i v2 LR77 v2 CR10 v2 UR5i v2L RR75i v2 LR77 v2L XR5i v2E
Bivias v2HC Bivias v2LC Bivias v2LL Bivias v2LH Bivias v2HH
SmartFlex SR300 SmartFlex SR303 SmartFlex SR304 SmartFlex SR305 SmartFlex SR306 SmartFlex SR307
SmartFlex SR308 SmartFlex SR309 SmartFlex SR310 SmartStart SL302 SmartStart SL304 SmartStart SL305
SmartStart SL306 SmartMotion ST352 SmartMotion ST355 ICR-320x ICR-321x ICR-323x ICR-324x
ICR-203x ICR-204x ICR-241x ICR-243x ICR-244x ICR-253x ICR-263x ICR-270x ICR-273x ICR-283x
ICR-383x ICR-440x ICR-443x ICR-445x

We have fixed the occasional malfunction of the Ethernet interface.

Fixed Ethernet Data Send Issue

SPECTRE 3G SPECTRE RT SPECTRE LTE-AT SPECTRE LTE-VZ
ER75i v2 UR5i v2 XR5i v2 LR77 v2 CR10 v2 UR5i v2L RR75i v2 LR77 v2L XR5i v2E
Bivias v2HC Bivias v2LC Bivias v2LL Bivias v2LH Bivias v2HH
SmartFlex SR300 SmartFlex SR303 SmartFlex SR304 SmartFlex SR305 SmartFlex SR306 SmartFlex SR307
SmartFlex SR308 SmartFlex SR309 SmartFlex SR310 SmartStart SL302 SmartStart SL304 SmartStart SL305
SmartStart SL306 SmartMotion ST352 SmartMotion ST355 ICR-320x ICR-321x ICR-323x ICR-324x
ICR-203x ICR-204x ICR-241x ICR-243x ICR-244x ICR-253x ICR-263x ICR-270x ICR-273x ICR-283x
ICR-383x ICR-440x ICR-443x ICR-445x

We have fixed the occasional error when sending data to the Ethernet interface.

Fixed Mobile Connection

SPECTRE 3G	SPECTRE RT	SPECTRE LTE-AT	SPECTRE LTE-VZ						
ER75i v2	UR5i v2	XR5i v2	LR77 v2	CR10 v2	UR5i v2L	RR75i v2	LR77 v2L	XR5i v2E	
Bivias v2HC	Bivias v2LC	Bivias v2LL	Bivias v2LH	Bivias v2HH					
SmartFlex SR300	SmartFlex SR303	SmartFlex SR304	SmartFlex SR305	SmartFlex SR306	SmartFlex SR307				
SmartFlex SR308	SmartFlex SR309	SmartFlex SR310		SmartStart SL302	SmartStart SL304	SmartStart SL305			
SmartStart SL306		SmartMotion ST352	SmartMotion ST355	ICR-320x	ICR-321x	ICR-323x	ICR-324x		
ICR-203x	ICR-204x	ICR-241x	ICR-243x	ICR-244x	ICR-253x	ICR-263x	ICR-270x	ICR-273x	ICR-283x
ICR-383x		ICR-440x	ICR-443x	ICR-445x					

We had fixed a mobile connection issue with no ARP support on some cellular modules when the *Check Connection* was set to *enabled + bind*.

Fixed Radius Authentication

SPECTRE 3G	SPECTRE RT	SPECTRE LTE-AT	SPECTRE LTE-VZ						
ER75i v2	UR5i v2	XR5i v2	LR77 v2	CR10 v2	UR5i v2L	RR75i v2	LR77 v2L	XR5i v2E	
Bivias v2HC	Bivias v2LC	Bivias v2LL	Bivias v2LH	Bivias v2HH					
SmartFlex SR300	SmartFlex SR303	SmartFlex SR304	SmartFlex SR305	SmartFlex SR306	SmartFlex SR307				
SmartFlex SR308	SmartFlex SR309	SmartFlex SR310		SmartStart SL302	SmartStart SL304	SmartStart SL305			
SmartStart SL306		SmartMotion ST352	SmartMotion ST355	ICR-320x	ICR-321x	ICR-323x	ICR-324x		
ICR-203x	ICR-204x	ICR-241x	ICR-243x	ICR-244x	ICR-253x	ICR-263x	ICR-270x	ICR-273x	ICR-283x
ICR-383x		ICR-440x	ICR-443x	ICR-445x					

We have fixed a minor issue with 802.1X authentication over Ethernet.

Upgraded zlib library

SPECTRE 3G	SPECTRE RT	SPECTRE LTE-AT	SPECTRE LTE-VZ						
ER75i v2	UR5i v2	XR5i v2	LR77 v2	CR10 v2	UR5i v2L	RR75i v2	LR77 v2L	XR5i v2E	
Bivias v2HC	Bivias v2LC	Bivias v2LL	Bivias v2LH	Bivias v2HH					
SmartFlex SR300	SmartFlex SR303	SmartFlex SR304	SmartFlex SR305	SmartFlex SR306	SmartFlex SR307				
SmartFlex SR308	SmartFlex SR309	SmartFlex SR310	SmartStart SL302	SmartStart SL304	SmartStart SL305				
SmartStart SL306	SmartMotion ST352	SmartMotion ST355	ICR-320x	ICR-321x	ICR-323x	ICR-324x			
ICR-203x	ICR-204x	ICR-241x	ICR-243x	ICR-244x	ICR-253x	ICR-263x	ICR-270x	ICR-273x	ICR-283x
ICR-383x	ICR-440x	ICR-443x	ICR-445x						

We have updated the zlib library to version 1.2.13. This update has fixed [CVE-2022-37434](#) (critical). For more details about this release, see the webpage at <https://www.zlib.net/>.

Updated curl Program

SPECTRE 3G	SPECTRE RT	SPECTRE LTE-AT	SPECTRE LTE-VZ						
ER75i v2	UR5i v2	XR5i v2	LR77 v2	CR10 v2	UR5i v2L	RR75i v2	LR77 v2L	XR5i v2E	
Bivias v2HC	Bivias v2LC	Bivias v2LL	Bivias v2LH	Bivias v2HH					
SmartFlex SR300	SmartFlex SR303	SmartFlex SR304	SmartFlex SR305	SmartFlex SR306	SmartFlex SR307				
SmartFlex SR308	SmartFlex SR309	SmartFlex SR310	SmartStart SL302	SmartStart SL304	SmartStart SL305				
SmartStart SL306	SmartMotion ST352	SmartMotion ST355	ICR-320x	ICR-321x	ICR-323x	ICR-324x			
ICR-203x	ICR-204x	ICR-241x	ICR-243x	ICR-244x	ICR-253x	ICR-263x	ICR-270x	ICR-273x	ICR-283x
ICR-383x	ICR-440x	ICR-443x	ICR-445x						

We have updated the curl program to version 7.86.0. This update has fixed [CVE-2022-32221](#) (critical), [CVE-2022-35260](#) (medium), [CVE-2022-42915](#) (critical), and [CVE-2022-42916](#) (high). For more details about this release, see the [Curl Changelog](#) webpage.

Updated dnsmasq Software

SPECTRE 3G	SPECTRE RT	SPECTRE LTE-AT	SPECTRE LTE-VZ						
ER75i v2	UR5i v2	XR5i v2	LR77 v2	CR10 v2	UR5i v2L	RR75i v2	LR77 v2L	XR5i v2E	
Bivias v2HC	Bivias v2LC	Bivias v2LL	Bivias v2LH	Bivias v2HH					
SmartFlex SR300	SmartFlex SR303	SmartFlex SR304	SmartFlex SR305	SmartFlex SR306	SmartFlex SR307				
SmartFlex SR308	SmartFlex SR309	SmartFlex SR310	SmartStart SL302	SmartStart SL304	SmartStart SL305				
SmartStart SL306	SmartMotion ST352	SmartMotion ST355	ICR-320x	ICR-321x	ICR-323x	ICR-324x			
ICR-203x	ICR-204x	ICR-241x	ICR-243x	ICR-244x	ICR-253x	ICR-263x	ICR-270x	ICR-273x	ICR-283x
ICR-383x	ICR-440x	ICR-443x	ICR-445x						

We have updated the dnsmasq software to version 2.87. This update has fixed [CVE-2022-0934](#) (high). For more details about the release, see [this link](#).

Updated dhcp-isc Software

SPECTRE 3G	SPECTRE RT	SPECTRE LTE-AT	SPECTRE LTE-VZ						
ER75i v2	UR5i v2	XR5i v2	LR77 v2	CR10 v2	UR5i v2L	RR75i v2	LR77 v2L	XR5i v2E	
Bivias v2HC	Bivias v2LC	Bivias v2LL	Bivias v2LH	Bivias v2HH					
SmartFlex SR300	SmartFlex SR303	SmartFlex SR304	SmartFlex SR305	SmartFlex SR306	SmartFlex SR307				
SmartFlex SR308	SmartFlex SR309	SmartFlex SR310	SmartStart SL302	SmartStart SL304	SmartStart SL305				
SmartStart SL306	SmartMotion ST352	SmartMotion ST355	ICR-320x	ICR-321x	ICR-323x	ICR-324x			
ICR-203x	ICR-204x	ICR-241x	ICR-243x	ICR-244x	ICR-253x	ICR-263x	ICR-270x	ICR-273x	ICR-283x
ICR-383x	ICR-440x	ICR-443x	ICR-445x						

We have updated the dhcp-isc program to version 4.1-ESV-R16-P2. This update has fixed [CVE-2022-2928](#) (medium) and [CVE-2022-2929](#) (medium). For more details about the release, see [this link](#).

Updated iptables Program

SPECTRE 3G	SPECTRE RT	SPECTRE LTE-AT	SPECTRE LTE-VZ						
ER75i v2	UR5i v2	XR5i v2	LR77 v2	CR10 v2	UR5i v2L	RR75i v2	LR77 v2L	XR5i v2E	
Bivias v2HC	Bivias v2LC	Bivias v2LL	Bivias v2LH	Bivias v2HH					
SmartFlex SR300	SmartFlex SR303	SmartFlex SR304	SmartFlex SR305	SmartFlex SR306	SmartFlex SR307				
SmartFlex SR308	SmartFlex SR309	SmartFlex SR310	SmartStart SL302	SmartStart SL304	SmartStart SL305				
SmartStart SL306	SmartMotion ST352	SmartMotion ST355	ICR-320x	ICR-321x	ICR-323x	ICR-324x			
ICR-203x	ICR-204x	ICR-241x	ICR-243x	ICR-244x	ICR-253x	ICR-263x	ICR-270x	ICR-273x	ICR-283x
ICR-383x	ICR-440x	ICR-443x	ICR-445x						

We have updated the Iptables program to version 1.8.8. This update has fixed [CVE-2012-2663](#) (N/A) and [CVE-2019-11360](#) (medium). For more details about the release, see [this link](#).

Updated keepalived Software

SPECTRE 3G	SPECTRE RT	SPECTRE LTE-AT	SPECTRE LTE-VZ						
ER75i v2	UR5i v2	XR5i v2	LR77 v2	CR10 v2	UR5i v2L	RR75i v2	LR77 v2L	XR5i v2E	
Bivias v2HC	Bivias v2LC	Bivias v2LL	Bivias v2LH	Bivias v2HH					
SmartFlex SR300	SmartFlex SR303	SmartFlex SR304	SmartFlex SR305	SmartFlex SR306	SmartFlex SR307				
SmartFlex SR308	SmartFlex SR309	SmartFlex SR310	SmartStart SL302	SmartStart SL304	SmartStart SL305				
SmartStart SL306	SmartMotion ST352	SmartMotion ST355	ICR-320x	ICR-321x	ICR-323x	ICR-324x			
ICR-203x	ICR-204x	ICR-241x	ICR-243x	ICR-244x	ICR-253x	ICR-263x	ICR-270x	ICR-273x	ICR-283x
ICR-383x	ICR-440x	ICR-443x	ICR-445x						

We have updated the keepalived software to version 2.2.7. This update has fixed [CVE-2018-19115](#) (critical) and [CVE-2021-44225](#) (medium).

Updated strongSwan Software

SPECTRE 3G	SPECTRE RT	SPECTRE LTE-AT	SPECTRE LTE-VZ						
ER75i v2	UR5i v2	XR5i v2	LR77 v2	CR10 v2	UR5i v2L	RR75i v2	LR77 v2L	XR5i v2E	
Bivias v2HC	Bivias v2LC	Bivias v2LL	Bivias v2LH	Bivias v2HH					
SmartFlex SR300	SmartFlex SR303	SmartFlex SR304	SmartFlex SR305	SmartFlex SR306	SmartFlex SR307				
SmartFlex SR308	SmartFlex SR309	SmartFlex SR310	SmartStart SL302	SmartStart SL304	SmartStart SL305				
SmartStart SL306	SmartMotion ST352	SmartMotion ST355	ICR-320x	ICR-321x	ICR-323x	ICR-324x			
ICR-203x	ICR-204x	ICR-241x	ICR-243x	ICR-244x	ICR-253x	ICR-263x	ICR-270x	ICR-273x	ICR-283x
ICR-383x	ICR-440x	ICR-443x	ICR-445x						

We have updated the strongSwan software to version 5.9.8. This update has fixed [CVE-2022-40617](#) (high). For more details about this release, see the [strongSwan 5.9.8 Changelog](#).

Updated tcdump Program

SPECTRE 3G	SPECTRE RT	SPECTRE LTE-AT	SPECTRE LTE-VZ						
ER75i v2	UR5i v2	XR5i v2	LR77 v2	CR10 v2	UR5i v2L	RR75i v2	LR77 v2L	XR5i v2E	
Bivias v2HC	Bivias v2LC	Bivias v2LL	Bivias v2LH	Bivias v2HH					
SmartFlex SR300	SmartFlex SR303	SmartFlex SR304	SmartFlex SR305	SmartFlex SR306	SmartFlex SR307				
SmartFlex SR308	SmartFlex SR309	SmartFlex SR310	SmartStart SL302	SmartStart SL304	SmartStart SL305				
SmartStart SL306	SmartMotion ST352	SmartMotion ST355	ICR-320x	ICR-321x	ICR-323x	ICR-324x			
ICR-203x	ICR-204x	ICR-241x	ICR-243x	ICR-244x	ICR-253x	ICR-263x	ICR-270x	ICR-273x	ICR-283x
ICR-383x	ICR-440x	ICR-443x	ICR-445x						

We have updated the tcdump program to version 4.99.1. This update has fixed [CVE-2018-16301](#) (high) and [CVE-2020-8037](#) (high).

Updated e2fsprogs Utilities

SPECTRE 3G	SPECTRE RT	SPECTRE LTE-AT	SPECTRE LTE-VZ						
ER75i v2	UR5i v2	XR5i v2	LR77 v2	CR10 v2	UR5i v2L	RR75i v2	LR77 v2L	XR5i v2E	
Bivias v2HC	Bivias v2LC	Bivias v2LL	Bivias v2LH	Bivias v2HH					
SmartFlex SR300	SmartFlex SR303	SmartFlex SR304	SmartFlex SR305	SmartFlex SR306	SmartFlex SR307				
SmartFlex SR308	SmartFlex SR309	SmartFlex SR310	SmartStart SL302	SmartStart SL304	SmartStart SL305				
SmartStart SL306	SmartMotion ST352	SmartMotion ST355	ICR-320x	ICR-321x	ICR-323x	ICR-324x			
ICR-203x	ICR-204x	ICR-241x	ICR-243x	ICR-244x	ICR-253x	ICR-263x	ICR-270x	ICR-273x	ICR-283x
ICR-383x	ICR-440x	ICR-443x	ICR-445x						

We have updated the e2fsprogs utilities to version 1.45.7. This update has fixed [CVE-2019-5094](#) (high) and [CVE-2019-5188](#) (high). For more details about this release, see [this link](#).

Part III

Known Issues

Firmware Update – Unexpected Filename

If the filename of firmware for your router was changed, you could have an issue during manual firmware update or with Automatic Update feature. This warning message will appear: *"You are trying to upload file "xx.bin" but "yy.bin" is expected. Are you sure to continue?"* To fix this issue follow instructions in Part I - [Firmware Update Instructions](#).

Automatic Update – Update to Version 6.1.10

The feature of automatic firmware update will not recognize the firmware version 6.1.10 as a new version in case the installed version of firmware is from 6.1.0 to 6.1.8. To fix this issue, either update the firmware by the automatic update to version 6.1.9 first or update it manually directly to the version 6.1.10.

WiFi Configuration – Lost After Firmware Downgrade

If the firmware is downgraded to the version earlier than 6.2.0, the WiFi configuration will be lost completely.

ICR-3200 – Country Code for WiFi

The first version of the firmware for the WiFi module does not support the settings of the country code. Due to this issue, the settings of the country code made on the configuration page has no effect at all. The country code is set up during the manufacturing process according to the product destination region.

SmartStart – Cellular Network Registration

It is necessary to use router's firmware version 6.1.5 or higher if the *Telit* cellular module installed in your SmartStart router has following version of the firmware:

- *Telit LE910-EU V2* cellular module with firmware version 20.00.403 or newer,
- *Telit LE910-NA1* cellular module with firmware version 20.00.014 or newer.

Note: The model name and firmware version of the cellular module can be found on router's web GUI at *Mobile WAN Status* page in *Mobile Network Information* section.

SmartStart SL302 – Cellular Network Authentication

It is not possible to use username and password when connecting to Mobile WAN network (on *Mobile WAN Configuration* page) if your SmartStart SL302 router has the 20.00.522 firmware version inside the Telit LE910-NA1 cellular module. The version of cellular module firmware can be found at *Mobile WAN Status* page in *Mobile Network Information* section.

SmartStart SL302 – SMS in Verizon Network

SmartStart SL302 router (equipped with the *Telit* modules *LE910-SV1* or *LE910-NA1*) supports sending and receiving of SMS in *Verizon* cellular network since the firmware version 6.1.4. Please note that to support SMS receiving, cellular module with *Verizon* firmware version higher than 20.00.012 is required.