

Technical Bulletin: AirLink 5G band n41 connectivity issue

OVERVIEW

DATE ISSUED:	29-Mar-2023
ISSUED BY:	Sierra Wireless Enterprise Solutions Product Management
PRODUCTS AFFECTED:	XR80, XR90, MG90
VARIANTS AFFECTED:	XR80 5G North America XR90 5G North America MG90 5G Single-Radio North America
FOR DISTRIBUTION TO:	Affected Customers & Channel Partners
SUMMARY:	<p>We are investigating an issue where North American MG90 5G single-radio and XR80/90 5G North American routers may experience <u>permanent and irreversible</u> connectivity issues on 5G band n41 used by T-Mobile and Rogers.</p> <p>This bulletin provides steps that our customers using PRODUCTS AFFECTED on T-Mobile and Rogers <u>must take</u> to ensure their routers remain operable until new firmware is released.</p> <p>The details are:</p> <ul style="list-style-type: none"> • 5G band n41 is used by T-Mobile and Rogers, therefore this issue only impacts 5G routers operating on T-Mobile and Rogers. • n41 may experience <u>permanent and irreversible damage</u>. The occurrence of the issue can be prevented by following the steps in the bulletin. <p>The following scenarios are NOT affected:</p> <ul style="list-style-type: none"> • Routers operating on other carriers e.g. Verizon, AT&T, Bell or Telus • XR80 4G routers • 5G routers operating in 4G mode • Routers operating on band 4G LTE B41 • North American MG90 5G dual-radio routers



ISSUE

DESCRIPTION & AFFECTED PART NUMBERS:

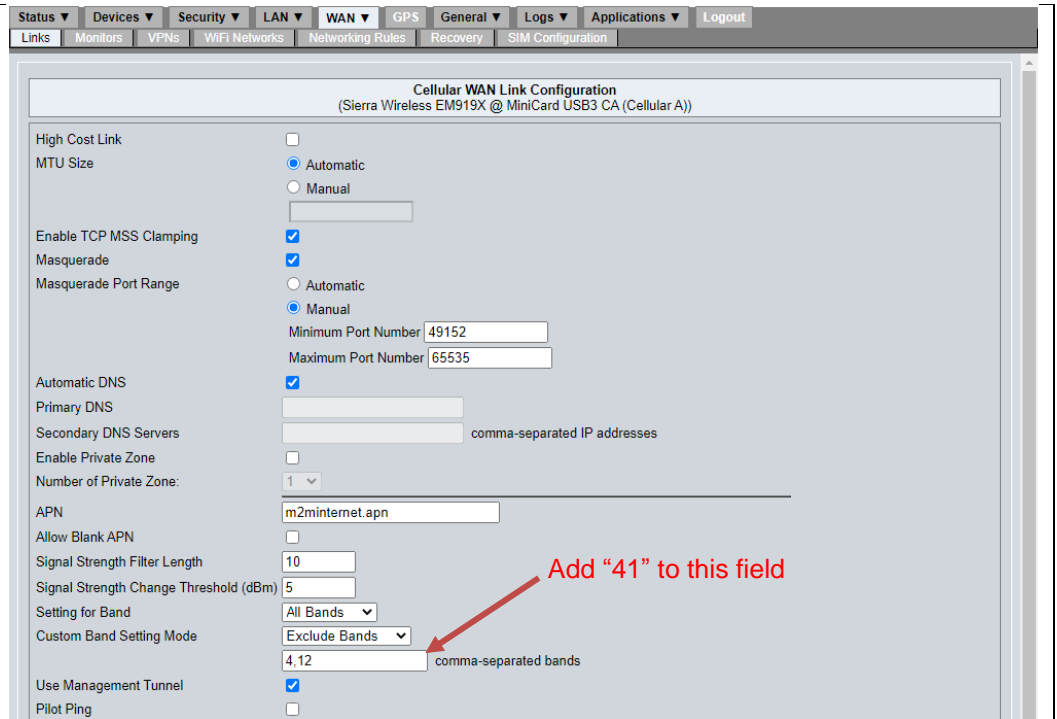
Affected AirLink 5G Routers on T-Mobile/Rogers		
AirLink SKU	Name	Operating System
1104708	MG90, Single 5G 4x4, Global	MGOS
1104785	XR90, Single 5G, North America	AIRLINK OS
1104786	XR90, Dual 5G, North America	AIRLINK OS
1104789	XR80, 5G, North America, Wi-Fi	AIRLINK OS
1104793	XR80, 5G, North America	AIRLINK OS

Unaffected AirLink 5G Routers		
AirLink SKU	Name	Operating System
1103980	MG90, Single LTE-A Pro, Global	MGOS
1103981	MG90, Single LTE-A Pro, North America	MGOS
1103982	MG90, Dual LTE-A Pro, North America	MGOS
1103983	MG90, Dual LTE-A Pro, Global	MGOS
1104709	MG90, Dual 5G 2x2, Global	MGOS
1104722	XR90, Single 5G, Global	AIRLINK OS
1104723	XR90, Dual 5G, Global	AIRLINK OS
1104787	XR80, 5G, Global, Wi-Fi	AIRLINK OS
1104791	XR80, 5G, Global	AIRLINK OS
1104878	XR80, 4G LTE Cat-20, Global, Wi-Fi	AIRLINK OS
1104879	XR80, 4G LTE Cat-20, North America, Wi-Fi	AIRLINK OS
1104880	XR80, 4G LTE Cat-20 Global	AIRLINK OS
1104881	XR80, 4G LTE Cat-20 North America	AIRLINK OS

GUIDANCE FOR MG90 CUSTOMERS:

Only North American MG90 5G single-radio routers operating on 5G T-Mobile and Rogers are affected.

- North American MG90 5G dual-radio routers are not impacted.
- For MG90 **PRODUCTS AFFECTED**, disable n41 now (see below) by adding "41" in the text input field
- An MGOS update that deploys updated radio module firmware will be available in May 2023.



Cellular WAN Link Configuration
(Sierra Wireless EM919X @ MiniCard USB3 CA (Cellular A))

High Cost Link

MTU Size Automatic
 Manual

Enable TCP MSS Clamping

Masquerade

Masquerade Port Range Automatic
 Manual
Minimum Port Number
Maximum Port Number

Automatic DNS

Primary DNS

Secondary DNS Servers comma-separated IP addresses

Enable Private Zone

Number of Private Zone:

APN

Allow Blank APN

Signal Strength Filter Length

Signal Strength Change Threshold (dBm)

Setting for Band

Custom Band Setting Mode comma-separated bands

Use Management Tunnel

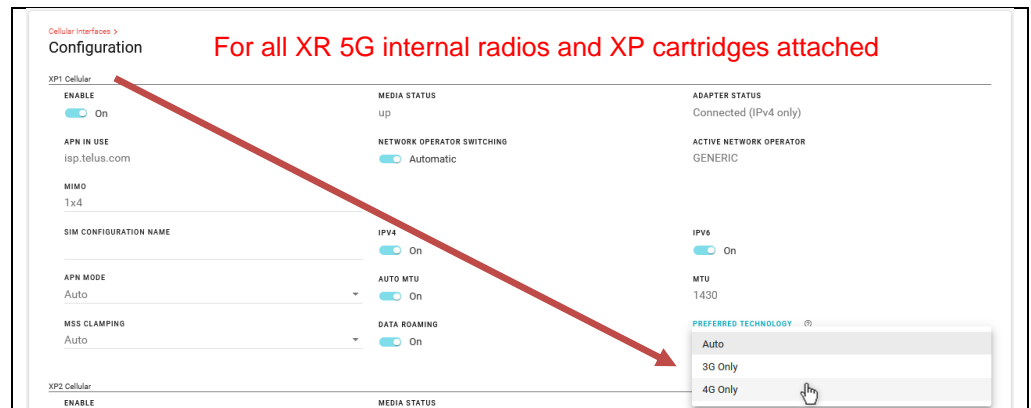
Pilot Ping

GUIDANCE FOR XR CUSTOMERS:

Only North American XR80/90 5G routers operating on 5G T-Mobile and Rogers are impacted.

- North American XR80 LTE routers are not impacted unless an XP-5G cartridge has been installed.
- For XR **PRODUCTS AFFECTED**, disable 5G operation now (see below).
- An AirLink OS update that deploys updated radio module firmware will be available in May 2023.

Navigate to PREFERRED TECHNOLOGY via Dashboard > Hardware Interfaces > Cellular Interfaces > Configuration and select "4G Only".



Cellular Interfaces > Configuration

For all XR 5G internal radios and XP cartridges attached

XP1 Cellular

ENABLE On

APN IN USE isp.telus.com

MIMO 1x4

SIM CONFIGURATION NAME

APN MODE Auto

MSS CLAMPING Auto

XP2 Cellular

MEDIA STATUS up

NETWORK OPERATOR SWITCHING Automatic

IPV4 On

AUTO MTU On

DATA ROAMING On

ADAPTER STATUS Connected (IPv4 only)

ACTIVE NETWORK OPERATOR GENERIC

IPV6 On

MTU 1430

PREFERRED TECHNOLOGY

- Auto
- 3G Only
- 4G Only

GUIDANCE FOR CHANNEL PARTNERS:

- Continue to ship **PRODUCTS AFFECTED** and advise end customers of this Bulletin.
- This Bulletin will be revised when the MGOS and AIRLINK OS releases are available.

CONTACT



SALES:	www.sierrawireless.com/how-to-buy/contact-sales 1-877-687-7795
CUSTOMER SUPPORT:	Ask for support here: <ul style="list-style-type: none">• www.sierrawireless.com/support Sign up to the Source for product resources and subscribe to product bulletins here: <ul style="list-style-type: none">• www.sierrawireless.com/sso/signup Sign up for Sierra Wireless Security Bulletins here: <ul style="list-style-type: none">• www.sierrawireless.com/company/iot-device-security/security-bulletins
RMA:	repairs@sierrawireless.com

REVISION HISTORY

March 29, 2023	Rev1: Initial announcement
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