

Product Change Notification

MultiTech Embedded Cellular Modems MultiTech Dragonfly™ SocketModem® Cell

MultiTech Cellular Modems and Routers MultiConnect® microCell MultiConnect® Cell 100 Series MultiConnect® rCell 100 Series

3G Sunset – Impacts on 4G-LTE Devices European Union and United Kingdom Deployments

Date: April 17, 2024

Product Change Notification (PCN) Number PCN 04102024-002

Overview

The purpose of this PCN is to help customers avoid service interruptions for certain MultiTech 4G-LTE devices impacted by the 3G network sunset in the European Union and United Kingdom.

In the European Union and United Kingdom, 4G-LTE devices may no longer attach to the cellular network after their 3G network is sunset. Configuration changes are required by the cellular module used in these devices to avoid a service disruption. Cellular modules can be controlled via the serial interface using standard AT Commands. The following AT Commands should be used to communicate directly with the cellular module or added to the host application to make the configuration changes necessary to avoid service disruptions.

Customers are most likely to experience service disruptions in one of the following use cases:

- SIM card is a single IMSI with only one wireless network operator
- SIM card requires a username and password to authenticate
- Local 3G network is already sunset or will soon be sunset
- Device is setup to operate in LTE only mode

For additional information and updates on the impact of 3G sunset on 4G-LTE devices in the United Kingdom and European Union, visit <u>https://multitech.com/eu-gb-3g-sunset/</u>

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Models Impacted

| Models | Description |
|-------------------------------|-----------------------------------|
| MultiTech Dragonfly | |
| MTQ-L1G2D | LTE Cat 1 Embedded Cellular Modem |
| MTQ-L4G1 | LTE Cat 4 Embedded Cellular Modem |
| MTQ-LEU7 | LTE Cat 4 Embedded Cellular Modem |
| SocketModem Cell | |
| MTSMC-L1G2D | LTE Cat 1 Embedded Cellular Modem |
| MTSMC-L4G1 | LTE Cat 4 Embedded Cellular Modem |
| MTSMC-L4E1 | LTE Cat 4 Embedded Cellular Modem |
| MultiConnect microCell | |
| MTCM2-L4G1 | LTE Cat 4 USB Cellular Modem |
| MTCM2-L4G1D | LTE Cat 4 USB Cellular Modem |
| MTCM2-L1G2D | LTE Cat 1 USB Cellular Modem |
| MultiConnect Cell 100 Series | |
| MTC-L4G2D | LTE Cat 4 Cellular Modem |
| MultiConnect rCell 100 Series | |
| MTR-L4G1 | LTE Cat 4 Cellular Router |
| MTR-LEU7 | LTE Cat 4 Cellular Router |



Update Devices Through the use of AT Commands

Requirements:

• 3G network is available or already sunset

Instructions:

- 1. Issue these AT Commands to the cellular module
- 2. Reboot device after making changes

AT Command / Description

AT+CEMODE – Set Mode of Operation for EPS (Evolved Packet System) Command: AT+CEMODE=2

- This command configures the mode of operation for EPS
- Syntax: AT+CEMODE=[<mode>]
 - <mode> 2 CS/PS mode 2 of operation

AT#CALLDISA - Call Disable Setting

Command: AT#CALLDISA=1,1

- This command controls the Disable Call Type and SMS only registration
- For -L4E1 models only
- Syntax: AT#CALLDISA =<disable_type>[,<sms_only>]

| <disable_type></disable_type> | 1 | Disable Voice Call |
|-------------------------------|---|-----------------------|
| <sms_only></sms_only> | 1 | SMS only registration |

AT\$QCPDPP – Set Authentication for PDP-IP

- This command is used to set authentication for PDP-IP packet data calls
- This command is only needed if the SIM card requires username and password

Command 1: AT\$QCPDPP=1,1,"password","username"

• Syntax: AT\$QCPDPP= <cid>, <auth_type>, <password>, <username>

| <cid></cid> | 1 | PDP context definition |
|-------------------------|---|------------------------|
| <auth_type></auth_type> | 1 | PAP authentication |
| <password></password> | - | |
| <username></username> | - | |

Command 2: AT\$QCPDPP=1,2,"password","username"

• Syntax: AT\$QCPDPP= <cid>, <auth_type>, <password>, <username>

| <cid></cid> | 1 PDP context definition | |
|-------------------------|--------------------------|---------------------|
| <auth_type></auth_type> | 2 | CHAP authentication |
| <password></password> | - | |
| <username></username> | - | |

Command 3: AT\$QCPDPP=?

Test Command. Repeat commands above if "OK" is not returned

Reboot device after making changes



AT Command Guides

AT Command Reference Guides for all impacted devices are available on <u>www.multitech.com</u>. See the links below.

MTQ-L1G2D, MTSMC-L1G2D, MTSMC-L4E1, MTCM2-L1G2D, MTC-L4G2D models

Telit LE910Cx AT Command Reference https://multitech.com/wp-content/uploads/80502ST10950A_LE910Cx-AT-Command-Reference.pdf

MTQ-L4G1, MTQ-LEU7, MTSMC-L4G1, MTCM2-L4G1, MTCM2-L4G1D, MTR-L4G1, MTR-LEU7 models QuecTel EG95/EG25 AT Command Guides

https://multitech.com/wp-content/uploads/EG95-EG25-docs.zip

Suggested Action Plan

- Contact your wireless network operator and understand their 3G network sunset plans and how this impacts your current and future deployments.
- Review the list of models impacted above and identify the ones used in your deployments.
- Identify any new devices received and not yet deployed.
- Update modems, routers, or host application using the options above.
- Establish a plan to update impacted deployments prior to the 3G sunset



Additional Information

For customers who have implemented the changes posted in this PCN and continue to experience 4G-LTE service interruptions, MultiTech suggests contacting your wireless network operator account representative with the following questions:

- Is my cellular service still active?
- Are my SIM cards LTE enabled?
- Is my device IMEI linked to a 3G account?

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Frequently Asked Questions, Knowledge Base

https://multitech.com/faqs/

Immediate access to support information and resolutions for all MultiTech products.

MultiTech Support Portal

<u>https://support.multitech.com/support/login.html</u> Create an account and submit a support case directly to our technical support team.

MultiTech Website

www.multitech.com

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Revision History

| Version | Author | Date | Change Description |
|---------|--------|------------|---|
| -001 | DT | 04/03/2024 | Original version |
| -002 | DT | 04/17/2024 | AT\$QCPDPP Command 3: AT\$QCPDPP=? Updated |