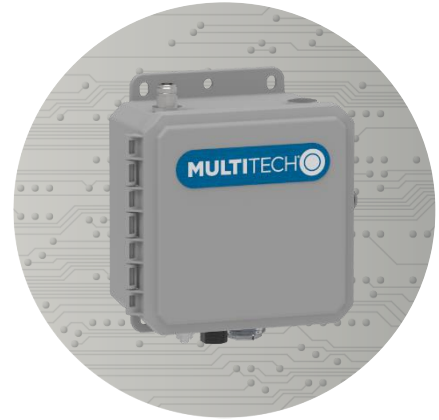


Product Change Notification

MultiTech Conduit[®] IP67 200 Series Base Station

Updated Operating System

- **mPower[™] Edge Intelligence Software
mPower 5.3.8**



Date: March 1, 2022

Product Change Notification (PCN) Number

PCN 03012022-001 (mPower – MTCDTIP2)

I. Overview

The mPower operating system in MTCDTIP2 devices is being updated to mPower 5.3.8 to update the gpsd version, and improve other features reported by some customers.

Schedule:

- Starting in March 2022, MultiTech will ship MTCDTIP2 devices with mPower 5.3.8

II. Suggested Action Plan

Customers

1. Download mPower 5.3.8
2. Evaluate in their environment
3. Additional information
 - Technical inquiries: support.multitech.com
 - Sales inquiries: email sales@multitech.com
 - mPower Software Release Notes: <https://www.multitech.com/documents/publications/sales-flyers/mPower%20Software%205.x.x%20Conduit%20Gateways.pdf>

Distributors

- Forward this announcement to others within your organization who are actively involved in the sale or support of programmable IoT gateways
- Notify existing customers that MTCDTIP2 devices are also shipping with an updated version of mPower software

Contents

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III. mPower 5.3.8 Changelog and Overview

Updates in mPower 5.3.8, from mPower 5.3.4b

OS Changes	New Hardware	New Feature	Feature Enhancement	Known Behaviors	Bug Fixes	Deprecations	Schedule	Models Impacted	Upgrade Process
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CAUTION (mPower 5.3.8)

mPower 5.3.8 is only for use with the MTCDTIP2 devices. See [Models Impacted](#) for details.

Operating System Component Updates (mPower 5.3.8)

gpsd upgraded from 3.1.6 to 3.20 LoRa packet forwarder and LoRa gateway software now use gpsd 3.20 This resolves an issue in gpsd 3.16 - After week=2180 (October 23, 2021), gpsd time will jump back 1024 weeks (March 2002) - Also resolve issue related to an excessive number of satellite connections	[GP-972] [SP-5108754]
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New Feature (mPower 5.3.8)

AT&T 3G Sunset – Impacts on 4G Devices - mPower 5.3.8 includes important updates to the current cellular module firmware defaults. These changes will help avoid service interruption for certain MultiTech 4G products impacted by the impending AT&T 3G network sunset - Current cellular module default: CEMODE=1 (Voice Centric) - New cellular module default: CEMODE=2 (Data Centric) - Overview of mPower 5.3.8 solution: - Once a device is updated to mPower 5.3.8, the wireless carrier for the cellular module will be determined - If the wireless carrier is AT&T, mPower 5.3.8 updates the cellular module firmware default - Current default: CEMODE=1 (Voice Centric) - New default: CEMODE=2 (Data Centric) - If a wireless carrier other than AT&T is recognized (i.e. Verizon Wireless), no changes to the cellular module firmware defaults are made - Additional Resources - AT&T Overview of 3G Sunset: https://iotdevices.att.com/att-iot/3GSunset.aspx MultiTech Overview of AT&T 3G Sunset Impact on 4G Devices	[GP-988] [GP-1111]
LoRaWAN AS923-4 Channel Plan for use in Israel - Support for LoRaWAN operation in Israel has been added - Channel Plan: AS923-4 - Band/Channels: 917 – 920 MHz - LoRaWAN Regional Parameters RP2-1.0.3	[GP-1218]

Feature Enhancement (mPower 5.3.8)

Updates to AS923-4 (Israel) Channel Plan Duty cycle increased to 10% when Israel channel plan is selected	[GP-1355]
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Bug Fix (mPower 5.3.8)

Gateway Not Sending LoRa Packets - In isolated situations, the MTCDTIP2 stops sending LoRa packets after a packet forwarder restart - Identified when LBT is enabled	[SP-5109775]
LoRa Packet Forwarder (LPF) Update 1: - Overview of LPF Bug: Packet transmit with duration above 370ms is blocked when LBT with scan time 128 us is enabled (AS923 – Country Selection JAPAN2) - Overview of LPF Bug Fix: Maximum packet duration is 400ms when TxDwellTime is enabled which is required for AS923 – Country Selection JAPAN2	[GP-1288] [SP-5107009]
LoRa Packet Forwarder (LPF) Update 2: - Overview of LPF Bug: Packet Forwarder may stop blocking transmissions when LBT is enabled. This situation may take a few weeks to occur (Seen in mPower 5.3.3 and prior versions) - Overview of LPF Bug Fix: mPower 5.3.8 periodically restarts the LPF. Process monitor forces an exit and restart of the process. (NOTE: Earlier mPower versions would hangup when trying to exit gracefully)	[GP-1288] [SP-5107009]

Schedule (mPower 5.3.8)

- Manufacturing Updates
 - mPower 5.3.8 will start shipping from MultiTech starting in March 2022
- DeviceHQ
 - mPower 5.3.8 Availability: March 2022
- Downloadable Versions
 - mPower 5.3.8 Availability: March 2022
 - Visit <http://www.multitech.net/developer/downloads/>
- Differential Files:
 - Visit <https://support.multitech.com/> to create a support case and request access to differential file updates

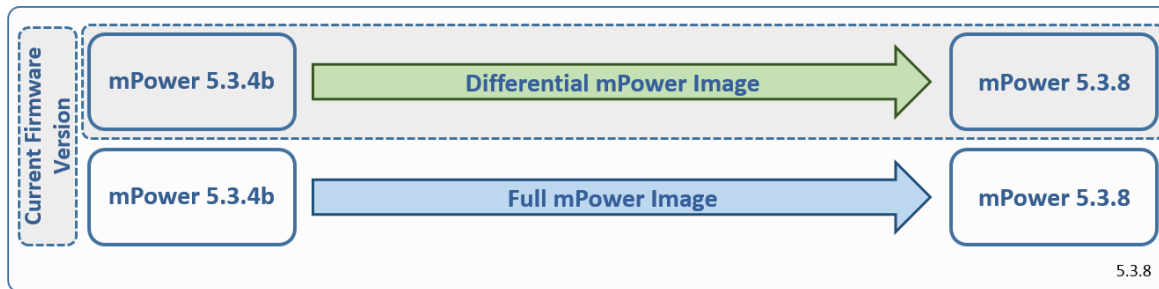
Models Impacted (mPower 5.3.8)

MultiTech Conduit® IP67 200 Series Base Station

	-B11EKP (EU868 Models)		-B11UKP (US915 Models)	
	-D1M Internal LoRa Antenna	-LIM External LoRa Antenna	-D1M Internal LoRa Antenna	-LIM External LoRa Antenna
MTCDTIP2-EN	•	•		•
MTCDTIP2-L4E1	•	•		
MTCDTIP2-LNA3				•

Upgrade Process (mPower 5.3.8)

Initial MTCDTIP2- device shipments included mPower 5.3.4b. Upgrades to mPower 5.3.8 can be done in two ways:



IV. Identifying Date of Manufacture (DOM)

DOM for all devices is identified on the chassis label, see example below.



DOM: 2022.03.01
DOM = Date of Manufacture
2022 = Year
03 = Month (March)
01 = Day

V. Identifying mPower Version

The carton label for each MTCTIP2 device includes an indication of the mPower version included.



XXXX/YYY/538

mPower Firmware Version
538 = mPower 5.3.8

VI. Additional Information

If you have any questions regarding this Product Change Notification/Software Release Notice, please contact your MultiTech sales representative or visit the technical resources listed below:

World Headquarters – USA

+1 (763) 785-3500 | sales@multitech.com

EMEA Headquarters – UK

+(44) 118 959 7774 | sales@multitech.co.uk

MultiTech Developer Resources:

www.multitech.net

An open environment where you can ask development related questions and hear back from MultiTech engineering or a member of this community.

Knowledge Base:

<http://www.multitech.com/kb.go>

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

MultiTech Support Portal:

support.multitech.com

Create an account and submit a support case directly to our technical support team.

MultiTech Website:

www.multitech.com

Revision History

Version	Author	Date	Change Description
-001	DT	03/01/2022	Original version