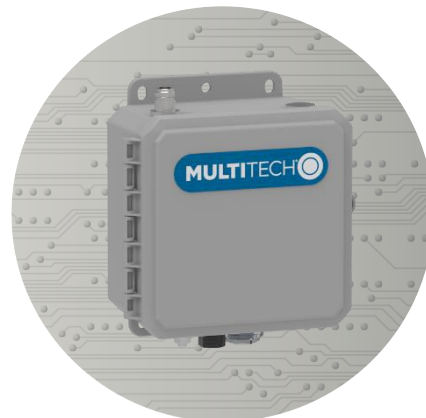


Product Change Notification

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

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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)

<p>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</p> <ul style="list-style-type: none"> • 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)

<p>AT&T 3G Sunset – Impacts on 4G Devices</p> <ul style="list-style-type: none"> • 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 <ul style="list-style-type: none"> ○ 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 <ul style="list-style-type: none"> ○ 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 <ul style="list-style-type: none"> ○ 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]
<p>LoRaWAN AS923-4 Channel Plan for use in Israel</p> <ul style="list-style-type: none"> • Support for LoRaWAN operation in Israel has been added <ul style="list-style-type: none"> ○ Channel Plan: AS923-4 ○ Band/Channels: 917 – 920 MHz ○ LoRaWAN Regional Parameters RP2-1.0.3 	[GP-1218]

Feature Enhancement (mPower 5.3.8)

<p>Updates to AS923-4 (Israel) Channel Plan</p> <ul style="list-style-type: none"> • Duty cycle increased to 10% when Israel channel plan is selected 	[GP-1355]
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Bug Fix (mPower 5.3.8)

<p>Gateway Not Sending LoRa Packets</p> <ul style="list-style-type: none"> In isolated situations, the MTCDTIP2 stops sending LoRa packets after a packet forwarder restart Identified when LBT is enabled 	[SP-5109775]
<p>LoRa Packet Forwarder (LPF) Update 1:</p> <ul style="list-style-type: none"> 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]
<p>LoRa Packet Forwarder (LPF) Update 2:</p> <ul style="list-style-type: none"> 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

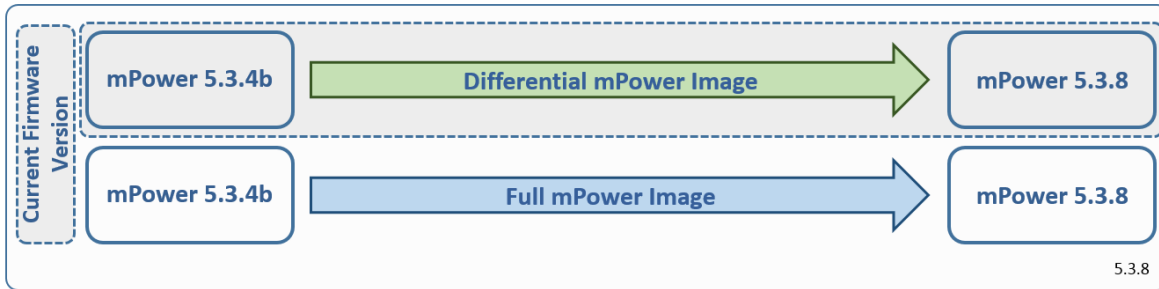
Models Impacted (mPower 5.3.8)

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				•

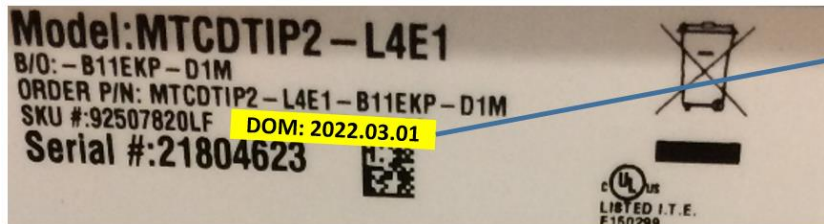
Upgrade Process (mPower 5.3.8)

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/YYYY/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