

Product Change Notification

MultiTech mCard™
Gateway Accessory Cards

MultiTech Conduit®
Programmable LoRa® Gateway

MultiTech Conduit® IP67 Base Station
Ruggedized IoT Gateway

New Model Numbers include Semtech SX1303 LoRa Gateway Transceiver

Date: October 3, 2024

I. Product Change Notification (PCN) Number

PCN 10032024-001

II. Summary

MultiTech announces new ordering part numbers for select Conduit Programmable LoRa gateways, and Conduit IP67 Base Stations that use the MTAC-003 gateway accessory card.

The MTAC-003 gateway accessory cards integrate the latest Semtech SX1303 LoRa Gateway Transceiver and deliver several improvements:

- Reduced energy costs
- Increased capacity and longer sensor battery life
- Improved real-time positioning

Current devices using the Semtech SX1301 LoRa Gateway Transceiver are Not Recommended for New Designs (NRND).

III. Key Dates

Not Recommended for New Designs (NRND): October 3, 2024

Near-End-of-Life (NEOL): November 1, 2024

Last Time Buy (LTB): February 1, 2025 (or while supplies last)

Non-Cancellable, Non-Returnable (NCNR) Agreement Required

End-Of-Life (EOL): May 1, 2025

IV. Impacted Products

mCard Gateway Accessory Cards		
Current Models Using Semtech SX1303	Ordering Part Number Description	NRND Models Using Semtech SX1301
MTAC-003E00	868 MHz LoRa Accessory Card, Antenna Sold Separately	MTAC-LORA-H-868
MTAC-003U00	915 MHz LoRa Accessory Card, Antenna Sold Separately	MTAC-LORA-H-915 MTAC-LORA-H-923-JP

Conduit LoRa Programmable Gateway		
NEW Ordering Part Number Using Semtech SX1303	NEW Ordering Part Number Description	NRND Ordering Part Number Using Semtech SX1301
MTCDT-L4G1-246A-915.R3-WW	LTE Cat 4 Programmable Gateway 8-channel, 915 MHz, GNSS with MTAC-003U00 mCard	MTCDT-L4G1-246A-915-WW MTCDT-LAP3-246A-915-AU MTCDT-LDC3-246A-923-JP MTCDT-LSB3-246A-923-JP MTCDT-L4E1-246A-915-EU-GB
MTCDT-L4G1-247A-915.R3-WW	LTE Cat 4 Programmable Gateway 8-channel, 915 MHz, GNSS + Wi-Fi/BT with MTAC- 003U00 mCard	MTCDT-L4G1-247A-915-WW MTCDT-LAP3-247A-915-AU MTCDT-L4E1-247A-915-EU-GB
MTCDT-L4G1-246A-868.R3-WW	LTE Cat 4 Programmable Gateway 8-channel, 868 MHz, GNSS with MTAC-003E00 mCard	MTCDT-L4G1-246A-868-WW
MTCDT-L4G1-247A-868.R3-WW	LTE Cat 4 Programmable Gateway 8-channel, 868 MHz, GNSS + Wi-Fi/BT with MTAC-003E00 mCard	MTCDT-L4G1-247A-868-WW
MTCDT-L4E1-246A-868.R3-EU-GB	LTE Cat 4 Programmable Gateway, 8-channel, 868 MHz, GNSS with MTAC-003E00 mCard	MTCDT-L4E1-246A-868-EU-GB
MTCDT-L4E1-247A-868.R3-EU-GB	LTE Cat 4 Programmable Gateway 8-channel, 868 MHz, GNSS + Wi-Fi/BT, with MTAC-003E00 mCard	MTCDT-L4E1-247A-868-EU-GB
MTCDT-L4N1-246A-915.R3-US	LTE Cat 4 Programmable Gateway, 8-channel, 915 MHz, GNSS with MTAC-003U00 mCard	MTCDT-L4N1-246A-915-US
MTCDT-L4N1-247A-915.R3-US	LTE Cat 4 Programmable Gateway 8-channel, 915 MHz, GNSS + Wi-Fi/BT, with MTAC-003U00 mCard	MTCDT-L4N1-247A-915-US
MTCDT-246A-868.R3-WW	Ethernet Only Programmable Gateway 8-channel, 868 MHz, GNSS with MTAC-003E00 mCard	MTCDT-246A-868-EU-GB
MTCDT-247A-868.R3-WW	Ethernet Only Programmable Gateway 8-channel, 868 MHz, GNSS + Wi-Fi/BT with MTAC-003E00 mCard	MTCDT-247A-868-EU-GB
MTCDT-246A-915.R3-WW	Ethernet Only Programmable Gateway 8-channel, 915 MHz, GNSS with MTAC-003U00 mCard	MTCDT-246A-915-US-EU-GB MTCDT-246A-923-JP MTCDT-246A-US-EU-GB-923KR

Conduit LoRa Programmable Gateway		
NEW Ordering Part Number Using Semtech SX1303	NEW Ordering Part Number Description	NRND Ordering Part Number Using Semtech SX1301
MTCDDT-247A-915.R3-WW	Ethernet Only Programmable Gateway 8-channel, 915 MHz, GNSS + Wi-Fi/BT with MTAC-003U00 mCard	MTCDDT-247A-915-US-EU-GB

Conduit IP67 Base Station		
NEW Ordering Part Number Using Semtech SX1303	NEW Ordering Part Number Description	NRND Ordering Part Number Using Semtech SX1301
MTCDTIP-L4G1-266A-915.R3	LTE Cat 4 Conduit IP67 Base Station 8-channel, 915 MHz, GNSS with MTAC-003U00 mCard	MTCDTIP-LAP3-266A-915 MTCDTIP-LSB3-266A-923-JP MTCDTIP-LDC3-266A-923-JP MTCDTIP-L4E1-266A-915
MTCDTIP-L4G1-266A-915.R3/2	LTE Cat 4 Conduit IP67 Base Station 8-channel, 915 MHz, GNSS with (2) MTAC-003U00 mCards	MTCDTIP-LAP3-266A-915/2
MTCDTIP-L4G1-267A-915.R3	LTE Cat 4 Conduit IP67 Base Station 8-channel, 915 MHz, GNSS + Wi-Fi/BT with MTAC-003E00 mCard	MTCDTIP-LAP3-267A-915
MTCDTIP-L4E1-266A-868.R3	LTE Cat 4 Conduit IP67 Base Station 8-channel, 868 MHz, GNSS with MTAC-003E00 mCard	MTCDTIP-L4E1-266A-868
MTCDTIP-L4E1-266A-868.R3/2	LTE Cat 4 Conduit IP67 Base Station 8-channel, 868 MHz, GNSS with (2) MTAC-003E00 mCards	MTCDTIP-L4E1-266A-868/2
MTCDTIP-L4E1-266A-868.R3-NLA	LTE Cat 4 Conduit IP67 Base Station 8-channel, 868 MHz, GNSS with MTAC-003E00 mCard (No LoRa Antenna)	MTCDTIP-L4E1-266A-868-NLA
MTCDTIP-L4E1-267A-868.R3	LTE Cat 4 Conduit IP67 Base Station 8-channel, 868 MHz, GNSS + Wi-Fi/BT with MTAC-003E00 mCard	MTCDTIP-L4E1-267A-868
MTCDTIP-L4N1-266A-915.R3	LTE Cat 4 Conduit IP67 Base Station 8-channel, 915 MHz, GNSS with MTAC-003U00 mCard	MTCDTIP-L4N1-266A-915
MTCDTIP-L4N1-266A-915.R3/2	LTE Cat 4 Conduit IP67 Base Station 8-channel, 915 MHz, GNSS with (2) MTAC-003U00 mCards	MTCDTIP-L4N1-266A-915/2
MTCDTIP-L4N1-267A-915.R3	LTE Cat 4 Conduit IP67 Base Station 8-channel, 915 MHz, GNSS + Wi-Fi/BT with MTAC-003U00 mCard	MTCDTIP-L4N1-267A-915
MTCDTIP-L4N1-267A-915.R3/2	LTE Cat 4 Conduit IP67 Base Station 8-channel, 915 MHz, GNSS + Wi-Fi/BT with (2) MTAC-003U00 mCards	MTCDTIP-L4N1-267A-915/2

Conduit IP67 Base Station		
NEW Ordering Part Number Using Semtech SX1303	NEW Ordering Part Number Description	NRND Ordering Part Number Using Semtech SX1301
MTCDTIP-266A-868.R3	Ethernet Only Conduit IP67 Base Station, 8-channel, 868 MHz, GNSS with MTAC-003U00 mCard and Accessory Kit	MTCDTIP-266A-868
MTCDTIP-266A-915.R3	Ethernet Only Conduit IP67 Base Station, 8-channel, 915 MHz, GNSS with MTAC-003U00 mCard and Accessory Kit	MTCDTIP-266A-915 MTCDTIP-266A-923-JP MTCDTIP-266A-923KR
MTCDTIP-267A-868.R3	Ethernet Only Conduit IP67 Base Station, 8-channel, 868 MHz, GNSS + Wi-Fi/BT/BLE with MTAC-003E00 mCard and Accessory Kit	MTCDTIP-267A-868
MTCDTIP-267A-915.R3	Ethernet Only Conduit IP67 Base Station, 8-channel, 915 MHz, GNSS + Wi-Fi/BT/BLE with MTAC-003E00 mCard and Accessory Kit	MTCDTIP-267A-915
MTCDTIP-266A-868.R3/2	Ethernet Only Conduit IP67 Base Station, 8-channel, 868 MHz, GNSS with (2) MTAC-003U00 mCards and Accessory Kit	MTCDTIP-266A-868/2
MTCDTIP-266A-915.R3/2	Ethernet Only Conduit IP67 Base Station, 8-channel, 915 MHz, GNSS with (2) MTAC-003U00 mCards and Accessory Kit	MTCDTIP-266A-915/2
MTCDTIP-267A-868.R3/2	Ethernet Only Conduit IP67 Base Station, 8-channel, 868 MHz, GNSS + Wi-Fi/BT/BLE with (2) MTAC-003E00 mCards and Accessory Kit	MTCDTIP-267A-868/2
MTCDTIP-267A-915.R3/2	Ethernet Only Conduit IP67 Base Station, 8-channel, 915 MHz, GNSS + Wi-Fi/BT/BLE with (2) MTAC-003E00 mCards and Accessory Kit	MTCDTIP-267A-915/2

V. Overview of Change

The MTAC-003 LoRa gateway accessory card is available separately or is included in select Conduit gateways and Conduit IP67 Base Stations. The MTAC-003 card includes the following enhancements as compared to the MTAC-LORA-H card:

- Additional spreading factors
- Network-based location services

Feature	ORDERING PART NUMBER MTAC-003	NRND ORDERING PART NUMBER MTAC-LORA-H																					
Model Number Schema	MTCDDT-.R3 models MTCDDTIP-.R3 models	-																					
Semtech LoRa Gateway Transceiver	SX1303	SX1301																					
Additional Spreading Factors	SF5 - SF12 • Optimized network performance • Increased LoRa traffic • Improved end-device battery performance	SF7 - SF12																					
Network-Based Sensor Location	• Fine time stamping • TDOA – Time Difference of Arrival from at least three gateways	• Semtech v2.1 reference design only																					
Availability	MTAC Gateway Accessory Card • MTAC-003 models	MTAC Gateway Accessory Card • MTAC-LORA-H models																					
	Conduit Gateways • Cellular and Ethernet-only models • .R3 models	Conduit Gateways • Cellular and Ethernet-only models																					
	Conduit IP67 Base Stations • Cellular and Ethernet-only models • .R3 models	Conduit IP67 Base Stations • Cellular and Ethernet-only models																					
mPower Operating System Support	mPower 6.X versions	mPower 6.X versions mPower 5.X versions																					
mPower Known Behavior	MTCDDT- devices can only be used with one version of MTAC LoRa Gateway Accessory Card <table border="1"> <thead> <tr> <th>AP1</th><th>AP2</th><th>Support</th></tr> </thead> <tbody> <tr> <td>MTAC-003</td><td>None</td><td>Supported</td></tr> <tr> <td>MTAC-003</td><td>MTAC-003</td><td>Supported</td></tr> <tr> <td>MTAC-LORA-H</td><td>None</td><td>Supported</td></tr> <tr> <td>MTAC-LORA-H</td><td>MTAC-LORA-H</td><td>Supported</td></tr> <tr> <td>MTAC-LORA-H</td><td>MTAC-003</td><td>Not Supported</td></tr> <tr> <td>MTAC-003</td><td>MTAC-LORA-H</td><td>Not Supported</td></tr> </tbody> </table>		AP1	AP2	Support	MTAC-003	None	Supported	MTAC-003	MTAC-003	Supported	MTAC-LORA-H	None	Supported	MTAC-LORA-H	MTAC-LORA-H	Supported	MTAC-LORA-H	MTAC-003	Not Supported	MTAC-003	MTAC-LORA-H	Not Supported
AP1	AP2	Support																					
MTAC-003	None	Supported																					
MTAC-003	MTAC-003	Supported																					
MTAC-LORA-H	None	Supported																					
MTAC-LORA-H	MTAC-LORA-H	Supported																					
MTAC-LORA-H	MTAC-003	Not Supported																					
MTAC-003	MTAC-LORA-H	Not Supported																					

VI. Cellular Module Overview

Select Conduit gateways and Conduit IP67 base stations include different cellular modules for data backhaul

	-L4G1 Models	-L4N1 Models	-L4E1 Models	-LAP3 Models
Performance	3GPP Release 11 4G-LTE FDD/TDD Category 4 150 Mbps peak downlink 50 Mbps peak uplink with 3G/2G fallback	3GPP Release 10 4G-LTE FDD Category 4 150 Mbps peak downlink 50 Mbps peak uplink with 3G fallback	3GPP Release 10 4G-LTE FDD Category 4 150 Mbps peak downlink 50 Mbps peak uplink with 3G/2G fallback	3GPP Release 10 4G-LTE FDD Category 1 10 Mbps peak downlink 5 Mbps peak uplink with 3G fallback
Frequency Bands (MHz)	4G LTE FDD (Europe): B1(2100), B3(1800), B7(2600), B8(900), B20(800), B28(700) 3G (Europe Fallback): B1(2100), B3(1800), B8(900) 2G (Europe Fallback): B2(1900), B3(1800), B8(900) 4G LTE FDD (AT&T): B2(1900), B4(AWS1700), B12(700) 4G LTE FDD (Verizon): B4(AWS1700), B13(700) 4G LTE FDD: B5(850), B18(800), B19(800), B25(1900), B26(850) 4G LTE TDD: B38(2600), B39(1900), B40(2300), B41(2500)	4G LTE FDD (AT&T): B2(1900), B4(AWS1700), B12(700), B14(700-FirstNet) 4G LTE FDD (T-Mobile): B2(1900), B4(AWS1700), B5(850), B66(AWS-3 1700), B71(600) 4G LTE FDD (Verizon): B4(AWS1700), B13(700) 3G (AT&T): B2(1900), B4(AWS1700), B5(850)	4G LTE FDD (Europe): B1(2100), B3(1800), B7(2600), B8(900), B20(800), B28A(700) 3G (Europe Fallback): B1(2100), B3(1800), B8(900) 2G (Europe Fallback): B3(1800), B8(900)	4G LTE FDD (Australia): B1(2100), B3(1800), B5(850), B8(900), B28(700) 3G: B1(2100), B5(850)
mPower™ Support	mPower 6.X versions	mPower 6.X versions mPower 5.X versions	mPower 6.X versions mPower 5.X versions	mPower 6.X versions mPower 5.X versions

VII. Additional Documentation

Additional documentation on is available on the MultiTech website:

MTAC-003 Developer Support:

<https://www.multitech.net/developer/products/multiconnect-conduit-platform/accessory-cards/mtac-003-lora-3-cards/>

MTAC-LORA-H Developer Support:

<https://www.multitech.net/developer/products/multiconnect-conduit-platform/accessory-cards/mtac-lora/>

Conduit and Conduit IP:

	-L4G1 Models	-L4N1 Models	-L4E1 Models	-LAP3 Models	Ethernet-Only Models
MTCDT Hardware Guide	S000787	S000733	S000731	S000718	S000690
MTCDTIP Hardware Guide	S000794	S000795	S000796	S000665	S000795 (915 MHz models) S000796 (868 MHz models)
AT Command Guides	EG95-EG25-docs	80502ST10950A	80502ST10950A	80502ST10950A	n/a

VIII. Warranty and Support

Two-Year Product Warranty

All MultiTech products include a two-year warranty that includes on-line technical support and 24-hour website support.

IX. Suggested Action Plan

To help facilitate the launch of the new ordering part numbers, we recommend the following actions be taken:

1. Forward this announcement to others within your organization who are actively involved in the sale or support of the devices referenced in this PCN.
2. Use the new ordering part numbers for all new designs.
3. Forward this announcement to existing customers and make them aware of the change in status for the devices references in this PCN.
4. Order samples of the new ordering part number for customer evaluation.
5. Note that there are behavior differences between the new and old devices listed in this PCN. Evaluate the new device in your current application before deploying.

X. Additional Information

If you have any questions or require additional information on this Product Change Notification, please contact your MultiTech sales representative or visit the technical resources listed below:

World Headquarters	+1 (763) 785-3500
United States	sales@multitech.com
EMEA	+(44) 118 959 7774
United Kingdom	sales@multitech.co.uk
MultiTech Website	www.multitech.com

MultiTech Support Portal	https://support.multitech.com/support/login.html
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MultiTech EOL Products Summary	https://multitech.com/eol-products/
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Revision History

Version	Author	Date	Change Description
-001	DT	10/03/2024	Original publication