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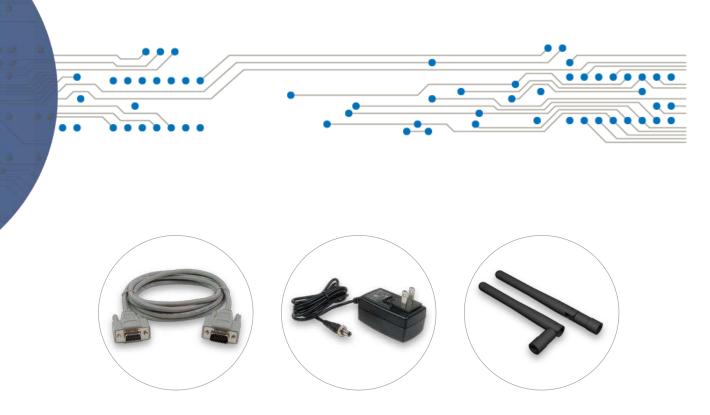
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# **Wireless Products**

# Accessories Ordering Guide

Release 1.6 December 30, 2016

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## Introduction

The purpose of this document is to provide the reader guidance when ordering accessories for MultiTech wireless products. This document will not provide any guidance on the selection of the wireless/cellular product to order. Please contact your sales representative for guidance in selecting the appropriate product for your application.

When ordering wireless/cellular products, you will have the option to order an un-bundled product (no power supply, antennas, interface cables etc...) or a bundled version that includes the product, power supply, antennas and interface cables in the packaging. If you order a bundled product, you likely will not need to order any of the accessories contained in this ordering guide unless you need a replacement item. If you order an un-bundled version of the product, utilize this ordering guide to assist you in selecting the various accessories you will need to operate the device.

Throughout this document, you will see a reference to certain models of products. For example, an "H5" or "MTR" model. If your device has an "H5" or "MTR" as part of its ordering part number, then the comment is applicable to your device.

Printed and downloaded versions of this document are uncontrolled. This document is updated periodically and new revisions are subsequently posted to MultiTech's website. The URL for the current revision of this document is listed below:

http://www.multitech.com/documents/publications/marketing-guides/cellular-products-accessories-ordering-guide.pdf

**Note:** The descriptions used in this document are descriptive in nature and might not match the descriptions located on the price list, web site or order documentation. Please reference those documents for the appropriate description.

Features and specifications are subject to change without notice.

## **Power Supplies for Cellular Products**

MultiTech cellular products operate on DC voltages. You can elect to power the cellular product with the following options:

- An AC adaptor that provides DC power to the cellular product
- Your own source of DC voltage

For the majority of products, the DC connection is made with a screw-on locking barrel connector.

## Options for Powering Cellular Devices with an AC Adaptor

For use with all models of cellular devices and the MTOCG-BOB-DK.

**Note:** MultiModem® Cell products with a –U designation (e.g. MTCBA-H5-U) and MultiConnect® Cell USB versions (e.g. MTC-H5-B03-KIT) operate on USB bus power and do not require a separate power supply.

**Note:** The description below contains the ISO country code for the type of AC power plug that is included with the power supply. For example, CN includes a Chinese power plug. These power supplies are rated for a maximum of 1.7 amps output.

Order PN	Description	Picture
PS-9VCB-LBC-U-NAM	100-240VAC/9VDC US Power Supply w/Locking Barrel	
PS-9VCB-LBC-U-EU	100-240VAC/9VDC EU Power Supply w/Locking Barrel	
PS-9VCB-LBC-U-GB/IE	100-240VAC/9VDC UK Power Supply w/Locking Barrel	
PS-9VCB-LBC-U-AU/NZ	100-240VAC/9VDC AU Power Supply w/Locking Barrel	
PS-9VCB-LBC-U-CN	100-240VAC/9VDC CN Power Supply w/Locking Barrel	

## Replacement Power Blades for AC adaptors

For use with power supply models starting with ordering part number PS-9VCB-LBC-U-xx listed on page 6 or the PS-9VCB-SBC-U-xx listed on page 9.

Order PN	Description	Picture
PB-NAM	US style locking power blade	
PB-EU	European style locking power blade	
PB-GB	UK style locking power blade	
PB-AU	Australian style locking power blade	
PB-CN	Chinese style locking power blade	

#### Options for Powering the Cellular Device with your own Source of DC Voltage

Order PN	Description	Picture
FPC-532-DC	DC Power Cable (w/Inline Fuse) (5 ft)	

#### Notes:

MultiConnect® rCell 100 series (MTR-xx models) and MultiConnect® Cell (MTC-xx models) products that utilize the FPC-532-DC power cable for general use must be connected to a UL listed LPS or Class 2 power supply. These products are UL 201 certified for in-vehicular use and must use the FPC-532-DC power cable for these installations.

#### **Options for Powering Cellular Development Kits**

For use with the following products:

Universal Socket Developer Kit	MultiConnect® OCG-E Developer Kit
MTSMI-UDK	MT100EOCG-DK
MTUDK2-ST-CELL	

**Note:** The description below contains the ISO country code for the type of AC power plug that is included with the power supply. For example, CN includes a Chinese power plug. These power supplies are rated for a maximum of 1.7 amps output.

Order PN	Description	Picture
PS-9VCB-SBC-U-NAM	100-240VAC/9VDC US Power Supply w/Push-on Barrel	
PS-9VCB-SBC-U-EU	100-240VAC/9VDC EU Power Supply w/Push-on Barrel	
PS-9VCB-SBC-U-GB/IE	100-240VAC/9VDC UK Power Supply w/Push-on Barrel	
PS-9VCB-SBC-U-AU/NZ	100-240VAC/9VDC AU Power Supply w/Push-on Barrel	
PS-9VCB-SBC-U-CN	100-240VAC/9VDC CN Power Supply w/Push-on Barrel	

#### **Antennas for Cellular Products**

You must order the correct antenna that supports the frequency bands that your cellular product operates in. Note that certain models of MultiTech products support a feature called diversity. If you want to take advantage of the diversity feature, you will require two cellular antennas per device.

If you would like to order an antenna that combines the cellular and GPS antennas into a single magnetic mount antenna, skip to the section on combined cellular and GPS antennas.

## Frequency Bands: 850/900/1800/1900 MHz

MultiConnect® rCell 100 Series	MultiConnect® Cell 100 Series
MTR-C2	MTC-C2
MTR-EV3	MTC-EV3
MTR-EV3	

MultiModem® iCell MultiModem® iSMS	
MTCMR-C2	SF100-G
	SF400-G
	SF800-G

SocketModem® Cell	SocketModem® iCell	QuickCarrier® USB-E	MultiConnect® OCG-E
MTSMC-C2	MTSMC-C2-IP/GP	MT100UCC-C2	MT100EOCG-EV3
MTSMC-EV3	MTSMC-EV3-IP/GP	MT100UCC-EV3	

Order PN	Description	Picture
ANQB-1HRA	850/900/1800/1900 MHz Antenna, 7" (2 dBi)(1 Pk)	
anqb-10hra	850/900/1800/1900 MHz Antenna, 7" (2 dBi)(10 Pk)	See above
ANQB-50HRA	850/900/1800/1900 MHz Antenna, 7" (2 dBi)(50 Pk)	See above

## Frequency Bands: LTE

MultiConnect® rCell 100 Series	MultiConnect® Conduit™	SocketModem® Cell
MTR-LAT1	MTCDT-LAT1	MTSMC-LAT1
MTR-LVW2		

Order PN	Description	Picture
ANLTE1-2HRA	LTE Antenna, 9" (2 dBi) (2 Pk)	
ANLTE1-10HRA	LTE Antenna, 9" (2 dBi)(10 Pk)	See above
ANLTE1-50HRA	LTE Antenna, 9" (2 dBi) (50 Pk)	See above

## Frequency Bands: LTE

MultiConnect® rCell 100 Series	MultiConnect® Conduit™	SocketModem® Cell	Developer Kit
MTR-LEU1	MTCDT-LEU1	MTSMC-LEU1	MTUDK2-ST-CELL
	MTCDT-LVW2	MTSMC-LVW2	

Order PN	Description	Picture
ANLTE2-2HRA	LTE Antenna, 7" (3.5 dBi) (2 Pk)	
ANLTE2-10HRA	LTE Antenna, 7" (3.5 dBi) (10 Pk)	See above
ANLTE2-50HRA	LTE Antenna, 7" (3.5 dBi) (50 Pk)	See above

## Frequency Bands: LTE

MultiConnect® Cell 100 Series	SocketModem® Cell
MTC-LAT1	MTSMC-LAT3
MTC-LVW2	MTSMC-LVW3

Order PN	Description	Picture
ANLTE3-2HRA	LTE Antenna, 7.5" (1 dBi)(2 Pk)	
ANLTE3-10HRA	LTE Antenna, 7.5" (1 dBi)(10 Pk)	See above
ANLTE3-50HRA	LTE Antenna, 7.5" (1 dBi)(50 Pk)	See above

## Frequency Bands: 850/900/1700/1800/1900/2100 MHz

MultiConnect® rCell 100 Series	MultiConnect® Cell 100 Series	
MTR-G3	MTC-G3	
MTR-H6	MTC-C2-xx-N3	

Order PN	Description	Picture
ANPB2-1HRA	850/900/1800/1900/2100 MHz Antenna, 4" (5 dBi)(1 Pk)	
ANPB2-10HRA	850/900/1800/1900/2100 MHz Antenna, 4" (5 dBi)(10 Pk)	See above
ANPB2-50HRA	850/900/1800/1900/2100 MHz Antenna, 4" (5 dBi)(50 Pk)	See above

## Frequency Bands: 850/900/1700/1800/1900/2100 MHz

MultiModem® rCell	MultiModem® iCell	MultiModem® Cell
MTCBA-H5-EN2	MTCMR-H5	MTCBA-H5

MultiConnect® rCell 100 Series	MultiConnect® Cell 100 Series	
MTR-H5	MTC-H5	
MTR-EV3		

MultiConnect® Conduit™	nduit <sup>™</sup> MultiConnect® OCG-D MultiConnect® AW	
MTCDT-H5	MTCDP-H5	MT200A2W-H5
MTCDT-EV3		

SocketModem® Cell	SocketModem® iCell	MultiConnect® OCG-E
MTSMC-H5	MTSMC-H5-IP	MT100EOCG-H5

MultiConnect® PCIe	QuickCarrier® USB-E	SocketModem® Shield
MTPCIE-H5	MT100UCC-H5	MTSAS-DK

Order PN	Description	Picture
ANHB-1HRA	850/900/1700/1800/1900/2100 MHz Antenna, 7" (3 dBi)(1 Pk)	
ANHB-10HRA	850/900/1700/1800/1900/2100 MHz Antenna, 7" (3 dBi)(10 Pk)	See above
ANHB-50HRA	850/900/1700/1800/1900/2100 MHz Antenna, 7" (3 dBi)(50 Pk)	See above

#### **Embedded Patch Antennas**

MultiConnect® Dragonfly™		
MTQ-H5		
MTQ-EV3		
MTQ-C2		

Order PN	Description	Picture
ANOB-1EMB	Octo-Band Embedded Patch Antenna (1 Pk)	etherthorices 1002202 3
ANOB-10EMB	Octo-Band Embedded Patch Antenna (10 Pk)	See above
ANOB-50EMB	Octo-Band Embedded Patch Antenna (50 Pk)	See above

## Frequency Bands: 900/1800 MHz (Typically used in Europe)

Other available antennas:

Order PN	Description	Picture
ANF1-1HRA	900/1800 MHz Antenna, 4" (0 dBi) (1 Pk)	*
ANF1-10HRA	900/1800 MHz Antenna, 4" (0 dBi) (10 Pk)	See above
ANF1-50HRA	900/1800 MHz Antenna, 4" (0 dBi) (50 Pk)	See above
ANF1-1MMQW	900/1800 MHz 1/4 Wave Antenna, Mag Mount, 4" (3 dBi)(1 Pk)	
ANF1-10MMQW	900/1800 MHz 1/4 Wave Antenna, Mag Mount, 4" (3 dBi)(10 Pk)	See above
ANF1-50MMQW	900/1800 MHz 1/4 Wave Antenna, Mag Mount, 4" (3 dBi)(50 Pk)	See above
ANF1-1MMHW	900/1800 MHz 1/2 Wave Antenna, Mag Mount, 12" (3 dBi)(1 Pk)	
ANF1-10MMHW	900/1800 MHz 1/2 Wave Antenna, Mag Mount, 12" (3 dBi)(10 Pk)	See above
ANF1-50MMHW	900/1800 MHz 1/2 Wave Antenna, Mag Mount, 12" (3 dBi)(50 Pk)	See above

## Frequency Bands: 850/1900 MHz (Typically used in North America)

Order PN	Description	Picture
ANCF2-1HRA	850/1900 MHz Antenna, 4" (0 dBi) (1 Pk)	<b>/</b>
ANCF2-10HRA	850/1900 MHz Antenna, 4" (0 dBi) (10 Pk)	See above
ANCF2-50HRA	850/1900 MHz Antenna, 4" (0 dBi) (50 Pk)	See above
ANCF2-1MMQW	850/1900 MHz 1/4 Wave Antenna, Mag Mount, 4" (3 dBi)(1 Pk)	
ANCF2-10MMQW	850/1900 MHz 1/4 Wave Antenna, Mag Mount, 4" (3 dBi)(10 Pk)	See above
ANCF2-50MMQW	850/1900 MHz 1/4 Wave Antenna, Mag Mount, 4" (3 dBi)(50 Pk)	See above
ANCF2-1MMHW	850/1900 MHz 1/2 Wave Antenna, Mag Mount, 12" (3 dBi)(1 Pk)	
ANCF2-10MMHW	850/1900 MHz 1/2 Wave Antenna, Mag Mount, 12" (3 dBi)(10 Pk)	See above
ANCF2-50MMHW	850/1900 MHz 1/2 Wave Antenna, Mag Mount, 12" (3 dBi)(50 Pk)	See above

#### Frequency Bands: 850/900/1700/1800/1900/2100 MHz

Order PN	Description	Picture
ANPB-1HRA	850/900/1700/1800/1900/2100 MHz Antenna, 3" (2 dBi)(1 Pk)	
ANPB-10HRA	850/900/1700/1800/1900/2100 MHz Antenna, 3" (2 dBi)(10 Pk)	See above
ANPB-50HRA	850/900/1700/1800/1900/2100 MHz Antenna, 3" (2 dBi)(50 Pk)	See above

#### **GPS Antennas for Cellular Products**

**Note:** If you would like to order an antenna that combines the cellular and GPS antennas into a single magnetic mount antenna, skip to the section on combined cellular and GPS antennas.

Order PN	Description	Picture
ANGPS-1MM	GPS Antenna, Mag Mount, 5 Meter Cable (1 Pk)	
ANGPS-10MM	GPS Antenna, Mag Mount, 5 Meter Cable (10 Pk)	See above
ANGPS-50MM	GPS Antenna, Mag Mount, 5 Meter Cable (50 Pk)	See above

#### Combined Cellular and GPS Antennas Frequency Bands: 850/900/1700/1800/1900/2100 MHz (cellular)

For use with all products

Order PN	Description	Picture
angsm-gps-1mm	GSM/GPS Antenna, Mag Mount, 5 Meter Cable (1 dBi)(1 Pk)	
angsm-gps-10mm	GSM/GPS Antenna, Mag Mount, 5 Meter Cable (1 dBi)(10 Pk)	See above
ANGSM-GPS-50MM	GSM/GPS Antenna, Mag Mount, 5 Meter Cable (1 dBi)(50 Pk)	See above

#### Wi-Fi/Bluetooth Antennas

**Note:** MultiTech Wi-Fi and Bluetooth products support operation of these technologies in the 2.4 GHz band.

For use with the following products (All varieties):

SocketWireless® Bluetooth®

MTS2BTSMI

Order PN	Description	Picture
ANBT-1HRA	2.4 GHz Wi-Fi/Bluetooth Antenna, 4" (2 dBi)(1 Pk)	<i>#</i>
ANBT-10HRA	2.4 GHz Wi-Fi/Bluetooth Antenna, 4" (2 dBi)(10 Pk)	See above
ANBT-50HRA	2.4 GHz Wi-Fi/Bluetooth Antenna, 4" (2 dBi)(50 Pk)	See above

For use with the following products (All varieties):

MultiConnect® rCell 100 Series

MTR-xx

Order PN	Description	Picture
ANWF-1HRA	2.4 GHz Wi-Fi/Bluetooth Antenna, 3" (1.8 dBi)(1 Pk)	
ANWF-10HRA	2.4 GHz Wi-Fi/Bluetooth Antenna, 3" (1.8 dBi)(10 Pk)	See above
ANWF-50HRA	2.4 GHz Wi-Fi/Bluetooth Antenna, 3" (1.8 dBi)(50 Pk)	See above

#### LoRa® Antennas Frequency Bands: 868/915 MHz

MultiConnect® Conduit™	MultiConnect® mDot™ Box	Conduit™ LoRa® Accessory Kit	Developer Kit
MTCDT-xx	MTDOT-BOX-G-xx	MTKIT-LORA-xx	MTUDK2-ST-MDOT
			MTMDK-ST-MDOT

Order PN	Description	Picture
AN868-915A-1HRA	868-915 MHz RP-SMA Antenna, 8" (3.0 dBi)(1 Pk)	
AN868-915A-10HRA	868-915 MHz RP-SMA Antenna, 8" (3.0 dBi)(10 Pk)	See above
AN868-915A-50HRA	868-915 MHz RP-SMA Antenna, 8" (3.0 dBi)(50 Pk)	See above

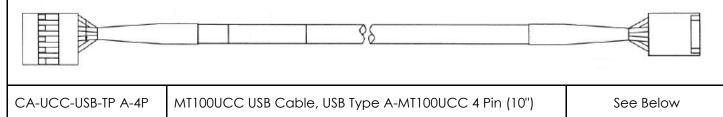
Serial Cables		
Order PN	Description	Picture
CA9-9-D	DE9M-DE9F Serial Cable (6 ft)	
CA-CDP-DEBUG	3-pin Serial Debug Cable (MTCDP, MTOCG and Developer Boards)	

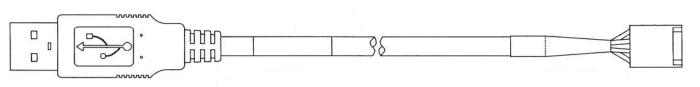
USB Cables				
Order PN	Description	Picture		
CA-USB	USB Cable Type A to Type B (4 ft)			
CA-USB-A-MINI-B	USB Cable Type A to Type B Mini (4 ft)			
CA-USB-A-MINI-B-3	USB Cable Type A to Type B Mini (24 AWG, 3 ft) (Compatible with MultiConnect Cell (MTC-xx))			
CA-USB-A-MICRO-B-3	USB Cable Type A to Type B Micro (3 ft)			

#### USB Data Cables for the QuickCarrier® USB-E

Note: For use with all varieties of QuickCarrier® USB-E (MT100UCC) products.

Order PN	Description	Picture
MT100UCC-AK	MT100UCC Kit 2 USB Cables, Antenna & 8.5" SMA-UFL Coax Cable	N/A
CA-UCC-USB-5P-4P	MT100UCC USB Cable, Mother Board 5 Pin-MT100UCC 4 Pin (10")	See Below





Ethernet Cables			
Order PN	Description	Picture	
CA-RJ-45	Ethernet Cable (RJ-45, 6 ft)		

GPIO Cables				
Order PN	Description	Picture		
CA-CMR-GPIO	6-Pin GPIO Cable for MTCMR iCell Intelligent Modems (5 ft)			
CA-CDP-GPIO	36-Pin GPIO Cable for MTCDP Series Programmable Gateway(12")			
CA-MTAC-GPIO	GPIO Cable for MTAC-GPIO Accessory Card (2.5 ft)	TALOROGOPHIA HANDER TO THE PARTY OF THE PART		

#### MultiConnect® OCG Break out Board

The MultiConnect OCG Break-out Board is designed to be used with MultiTech's MTCDP and MT100EOCG series of Programmable Gateways. It provides a quick and easy way to simulate your application environment, exercise common analog and digital inputs, and quickly complete general purpose connections using the GPIO cable and quick-connects.

#### Features

- GPIO cable and GPIO connectors simplify testing needs
- Four analog potentiometers simulate sensor inputs
- Eight physical switches simulate digital signal inputs
- Jumpers enable additional power and ground options
- Package also includes power supply, US, UK and EU power plugs and GPIO cable

For use with the following models:

MTCDP-xx (All varieties)

MT100EOCG-xx (All varieties)

Order PN	Description	Picture
MTOCG-BOB-DK	Programmable Gateway Break-Out Board (use with MTCDP and EOCG)	See below

