

Cellular Products

Accessories Ordering Guide

Release 1.5
December 29, 2014

Revision History

Release	Date	Change details
1.5	12/29/2014	Updated MTC-C2 antenna options Added MTR-EV3, MTC-EV3 and MTCDP-EV3 models Removed serial cable CA15-9-DV (discontinued)
1.4	4/23/2014	Added replacement power blades for power supplies
1.3	3/4/2014	Added MTPCIE, MTR-H5, MTC-H5 and MTCMR-EV3 products Updated several antenna options
1.2	9/16/2013	Added new USB cable for MultiConnect® Cell 100 series products (MTC-xx) Added MTR-C2, MTC-C2 and MTCMR-C2 products (New products)
1.1	8/22/2013	Added DIN Rail Mounting Accessory Kits
1.0	7/10/2013	Initial release

Table of Contents

<u>Power Supplies for Cellular Products</u>	5
<u>AC Adaptor Power Supplies</u>	6
<u>Replacement Power Blades for AC adaptors</u>	7
<u>IEC-320 Style Power Supplies</u>	8
<u>Optional AC Adaptor Power Supply (US only)</u>	9
<u>Power Supplies for MTCBA-H3-EN3 Products</u>	10
<u>DC Power Cables</u>	11
<u>Power Supplies for Cellular Development Kits</u>	12
<u>Antennas for Cellular Products</u>	13
<u>Cellular Antennas</u>	14
<u>GPS Antennas</u>	20
<u>Combined Cellular and GPS Antennas</u>	20
<u>Wi-Fi/Bluetooth Antennas</u>	21
<u>Interface Cables</u>	22
<u>Serial Cables</u>	22
<u>USB Cables</u>	23
<u>USB Cables for QuickCarrier™ USB-E</u>	23
<u>Ethernet Cables</u>	24
<u>GPIO Cables</u>	24
<u>MultiConnect® OCG Break out Board</u>	25
<u>RF Cables for Embedded Cellular Products</u>	25
<u>SMA-to-MMCX</u>	26
<u>Reverse SMA-to-MMCX</u>	27
<u>SMA-to-UFL</u>	28
<u>Reverse SMA-to-UFL</u>	29
<u>Mounting Brackets</u>	30
<u>MultiConnect® rCell 100 Series Cellular Routers</u>	30
<u>MultiModem® GPRS and CDMA Cellular Modems</u>	31
<u>DIN Rail Mounting Kits</u>	32
<u>MultiModem® Cell, iCell, rCell and MultiConnect® OCG</u>	32
<u>MultiModem® Cell, iCell, rCell and MultiConnect® OCG Right Angle</u> ...	33
<u>MultiConnect® rCell 100 Series Cellular Routers</u>	34
Table 1	
<u>MultiTech® GSM Product Frequencies</u>	35
Table 2	
<u>MultiTech® CDMA Product Frequencies</u>	35

Introduction

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

When ordering cellular products, you will have the option to order an un-bundled cellular product (no power supply, antennas, interface cables etc...) or a bundled version that includes the cellular 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/cpag.go>

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.

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 with the exception of MTCBA-H3-EN3 models.

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 above or the PS-9VCB-SBC-U-xx listed below.

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 cellular devices with an IEC-320 style AC adaptor

For use with all models of cellular devices and the MTOCG-BOB-DK with the exception of MTCBA-H3-EN3 models.








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: This option requires you to order the power supply and a separate IEC-320 power cord with the proper power plug for the region of operation. In installations that utilize an IEC-320 Uninterruptable Power Supply (UPS), the power cord might not be required. These power supplies are rated for a maximum of 1.0 amp output.

Step 1: Order the power supply

Order PN	Description	Picture
PS-9V1A-LBC-U	100-240VAC/9VDC IEC-320 Power Supply w/o Cord w/Locking Barrel	

Step 2: Order the appropriate IEC-320 power cord for your region of operation


Order PN	Description	Picture
PC-IEC320-NAM	IEC-320 Power Cord w/US plug	
PC-IEC320-EURO	IEC-320 Power Cord w/EU plug	
PC-IEC320-GB	IEC-320 Power Cord w/UK plug	
PC-IEC320-AU	IEC-320 Power Cord w/Australian plug	
PC-IEC320-CN	IEC-320 Power Cord w/Chinese plug	
PC-IEC320-IN	IEC-320 Power Cord w/Indian plug	
PC-IEC320-JP	IEC-320 Power Cord w/Japanese plug	

**Option for powering the following cellular devices
with an AC adaptor with US power plug**

For use with the following discontinued products (All varieties):

MultiModem® Cell
MTCBA-C
MTCBA-E
MTCBA-G-F4

Note: The products referenced above only require 4.5 watts or less of power to operate. This model of power supply is only available with a US style power plug. This power supply will not work with any other cellular products other than the models listed above. This power supply is rated for a maximum of 0.5 amps (500 mA) output at 9 VDC.




Order PN	Description	Picture
PS-9V500MA-LBC	110-120VAC/9VDC US Power Supply (4.5 watt) w/Locking Barrel	

Options for powering all versions of MTCBA-H3-EN3 cellular devices



Note: This model operates on 5 volts DC. These power supplies are rated for a maximum of 2.6 amps output. (MTCBA-H3-EN3 products are discontinued)

MTCBA-H3-EN3



Order PN	Description	Picture
PS-5VCB-LBC-U-NAM	100-240VAC/5VDC US Power Supply w/Locking Barrel	 A black power supply unit with a standard two-prong US AC plug and a black barrel jack cable.
PS-5VCB-LBC-U-EU	100-240VAC/5VDC EU Power Supply w/Locking Barrel	 A black power supply unit with a standard two-prong EU AC plug and a black barrel jack cable.
PS-5VCB-LBC-U-GB/IE	100-240VAC/5VDC UK Power Supply w/Locking Barrel	 A black power supply unit with a three-prong UK AC plug and a black barrel jack cable.

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)	
PC-932-DC	DC Power Cable (w/o 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.






Safety certification (Example: UL60950-1) of any device has not been evaluated with the PC-932-DC DC power cable or the power source it is connected to. The DC power cable and power source do not apply or extend to the device's safety certification unless noted otherwise in the device documentation. It is recommended that the optional DC power cable, power source and device be evaluated by an accredited safety agency such as UL or equivalent.

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

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.

To determine the frequency bands that your product uses, please consult Table 1 at the end of this document.

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


For use with the following products (All varieties):

MultiConnect® rCell	MultiConnect® Cell	MultiConnect® OCG-D	MultiConnect® AW
MTR-C2	MTC-C2-xx-N2	MTCDP-E1	MT100A2W-G
MTR-EV3	MTC-C2-xx-N16	MTCDP-EV2	MT200A2W-C1
	MTC-EV3	MTCDP-EV3	MT200A2W-G
		MTCDP-G2	
		MTCDP-H4	

MultiModem® rCell	MultiModem® iCell	MultiModem® Cell	MultiModem® iSMS
MTCBA-C1-EN2	MTCMR-C1	MTCBA-C1	SF100-G
MTCBA-G2-EN2	MTCMR-E1	MTCBA-C1X	SF400-G
MTCBA-H4-EN2	MTCMR-EV2	MTCBA-E1	SF800-G
MTCBA-E1-EN2	MTCMR-G2	MTCBA-G2	
MTCBA-EV2-EN2	MTCMR-G-F4	MTCBA-G-F4	
MTCBA-H3-EN3	MTCMR-H4	MTCBA-H3	
	MTCMR-C2		
	MTCMR-EV3		

SocketModem® Cell	SocketModem® iCell	Quick Carrier™ USB-E	MultiConnect® OCG-E
MTSMC-C1	MTSMC-C1-IP/GP	MT100UCC-C2	MT100EOCG-EV2
MTSMC-C2	MTSMC-C2-IP/GP	MT100UCC-EV2	MT100EOCG-EV3
MTSMC-E1	MTSMC-EV2-IP/GP	MT100UCC-EV3	MT100EOCG-G2
MTSMC-EV3	MTSMC-EV3-IP/GP	MT100UCC-G2	MT100EOCG-H4
MTSMC-G2	MTSMC-G2-IP/GP	MT100UCC-H3	
MTSMC-G-F4	MTSMC-G-F4-IP	MT100UCC-H4	
MTSMC-H3-U	MTSMC-H3-IP		
	MTSMC-H4-IP/GP		


MultiConnect® PCIE
MTPCIE-EV3
MTPCIE-C2

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: 850/900/1700/1800/1900/2100 MHz

For use with the following products (All varieties):


MultiModem® rCell	MultiModem® iCell	MultiModem® Cell
MTCBA-C1-EN2	MTCMR-C1	MTCBA -C1
MTCBA -E1-EN2	MTCMR -E1	MTCBA -C1X
MTCBA -EV2-EN2	MTCMR -EV2	MTCBA -E1
MTCBA -G2-EN2	MTCMR -G2	MTCBA -G2
MTCBA -H4-EN2-P1	MTCMR -H4-P1	
MTCBA -H4-EN2-P2	MTCMR -H4-P2	

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

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

For use with the following products (All varieties):

MultiConnect® rCell	MultiConnect® Cell
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)(1 Pk)	See above
ANPB2-50HRA	850/900/1800/1900/2100 MHz Antenna, 4" (5 dBi)(1 Pk)	See above

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

For use with the following products (All varieties):


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

MultiConnect® rCell	MultiConnect® Cell
MTR-H5	MTC-H5

MultiConnect® OCG-D	MultiConnect® AW
MTCDP-H5	MT200A2W-H5

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




MultiConnect® PCIe	Quick Carrier™ USB-E
MTPCIE-H5	MT100UCC-H5
MTPCIE-H5-V-BW	

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

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

For use with the following products (All varieties):



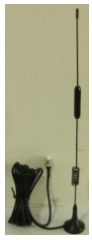
MultiModem® Cell	SocketModem® Cell	SocketModem® iCell	MMCModem™
MTCBA-G-F1	MTSMC-G-F1	MTSMC-G-F1-IP	MTMMC-G-F1

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)


For use with the following products (All varieties):

MultiModem® Cell	SocketModem® Cell	SocketModem® iCell	MMCModem™
MTCBA-C	MTSMC-C	MTSMC-C-IP	MTMMC-C
MTCBA-G-F2	MTSMC-G-F2	MTSMC-G-F2-IP	MTMMC-G-F2

Order PN	Description	Picture
ANCF2-1HRA	850/1900 MHz Antenna, 4" (0 dBi) (1 Pk)	
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

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®	SocketWireless® Wi-Fi®
MTS2BTSMI	MT810SWM-IP




Order PN	Description	Picture
ANBT-1HRA	2.4 GHz Wi-Fi/Bluetooth Antenna, 4" (2 dBi)(1 Pk)	
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

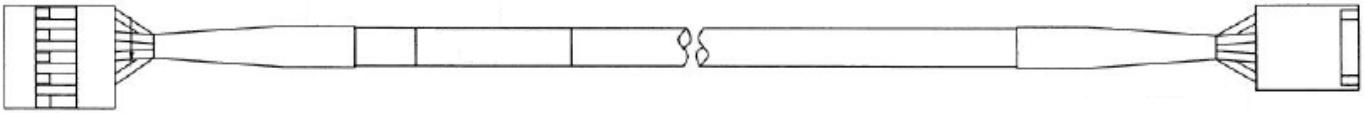
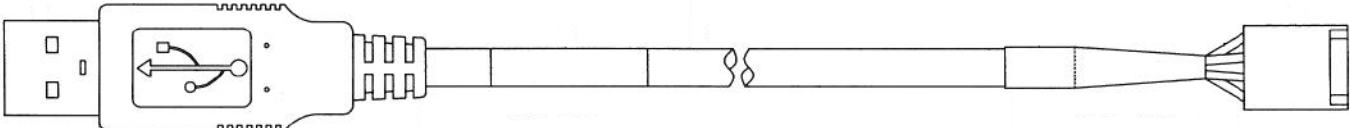
For use with the following products (All varieties):


MultiConnect® rCell 100 Series	MultiConnect® OCG-D	MultiConnect® PCIe
MTR-xx	MTOCGD3-xx	MTPCIE-H5-V-BW
		MTPCIE-BW



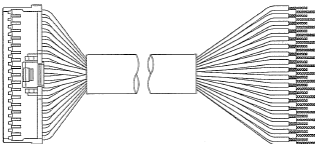
Order PN	Description	Picture
ANWF-1HRA	2.4 GHz Wi-Fi/Bluetooth Antenna, 3" (1.8 dBi)(1 Pk)	
ANWF-10HRA	2.4 GHz Wi-Fi/Bluetooth Antenna, 3" (1.8 dBi)(10 Pk)	See above
ANWF-50HRA	2.4 GHz Wi-Fi/Bluetooth Antenna, 3" (1.8 dBi)(50 Pk)	See above

Serial Cables		
Order PN	Description	Picture
CA9-9-D	DE9M-DE9F Serial Cable (6 ft)	
CA15-9-D	DE15M-DE9F Serial Cable, Data Only (6 ft)	
CA15-9-ADP	DE15M-DE9F Adapter	
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))	

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
		
CA-UCC-USB-TP A-4P	MT100UCC USB Cable, USB Type A-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")	

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.

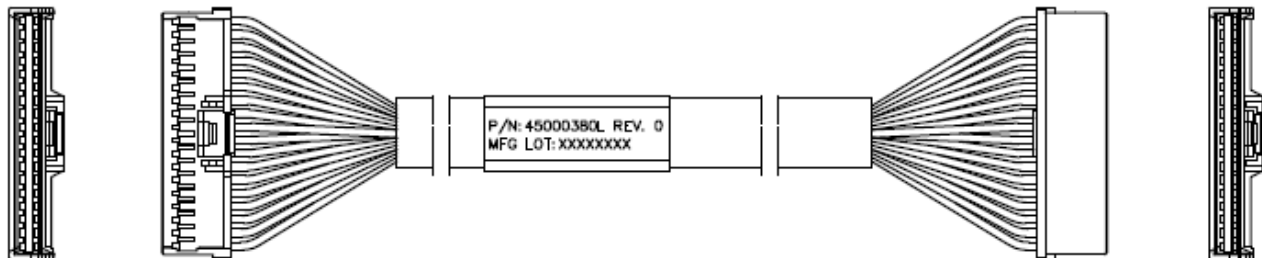
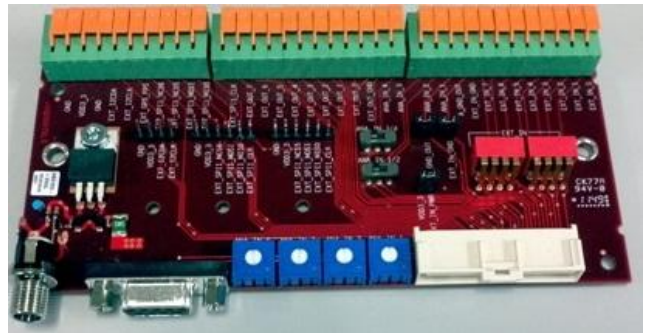
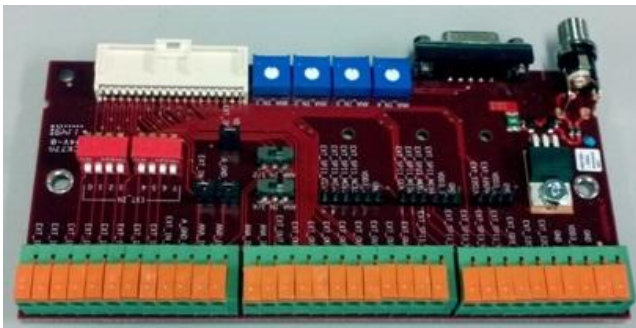
Features

- 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



RF Cables for embedded cellular products

MultiTech embedded cellular products contain surface mount RF connectors on the PCB that are used to interface with an RF cable and antenna. The RF cables listed below include an appropriate connector that interfaces with the surface mount connector on one end and a bulk head panel mount SMA connector on the other. For the cellular connection, a standard SMA connector is specified. For Wi-Fi and/or Bluetooth connections, a reverse polarity SMA (RSMA) connector is specified.

SMA-to-MMCX Antenna Cables

Note: Used for the cellular connection with embedded models that utilize an MMCX connector on the PCB.



For use with the following products (All varieties):

SocketModem® EDGE
MTSMC-E
MTSMC-E1

Order PN	Description	Picture
CASMA-MMCX-1	SMA-to-MMCX Coax RF Cable, 6" (1 Pk)	See Above
CASMA-MMCX-10	SMA-to-MMCX Coax RF Cable, 6", (10 Pk)	See Above
CASMA-MMCX-50	SMA-to-MMCX Coax RF Cable, 6", (50 Pk)	See Above

Reverse SMA-to-MMCX Antenna Cables

Note: Used for the Wi-Fi/Bluetooth connection with embedded models that utilize an MMCX connector on the PCB.



For use with the following products (All varieties):

SocketWireless® Bluetooth®

MTS2BTSMI

Order PN	Description	Picture
CARSMA-MMCX-1F	Reverse SMA-to-MMCX Coax RF Cable, 6" (1 Pk)	See Above
CARSMA-MMCX-10	Reverse SMA-to-MMCX Coax RF Cable, 6" (10 Pk)	See Above
CARSMA-MMCX-50	Reverse SMA-to-MMCX Coax RF Cable, 6" (50 Pk)	See Above

SMA-to-UFL Antenna Cables

Note: Used for the cellular connection with embedded models that utilize an UFL connector on the PCB.



For use with the following products (All varieties):

SocketModem® Cell	SocketModem® iCell	QuickCarrier™ USB-E	MultiConnect® OCG-E	MultiConnect® PCIe
MTSMC-C1	MTSMC-C1-IP/GP	MT100UCC-C2	MT100EOCG-EV2	MTPCIE-H5
MTSMC-C2	MTSMC-C2-IP/GP	MT100UCC-EV2	MT100EOCG-EV3	MTPCIE-H5-V-BW
MTSMC-EV3	MTSMC-EV2-IP/GP	MT100UCC-EV3	MT100EOCG-G2	MTPCIE-EV3
MTSMC-G2	MTSMC-EV3-IP/GP	MT100UCC-G2	MT100EOCG-H4	MTPCIE-C2
MTSMC-H3-U	MTSMC-G2-IP/GP	MT100UCC-H3	MT100EOCG-H5	
MTSMC-H4	MTSMC-H3-IP	MT100UCC-H4		
MTSMC-H5	MTSMC-H4-IP/GP	MT100UCC-H5		
	MTSMC-H5-IP/GP			

Order PN	Description	Picture
CASMA-UFL-1	SMA-to-UFL Coax RF Cable, 8" (1 Pk)	See Above
CASMA-UFL-10	SMA-to-UFL Coax RF Cable, 8" (10 Pk)	See Above
CASMA-UFL-50	SMA-to-UFL Coax RF Cable, 8" (50 Pk)	See Above

Reverse SMA-to-UFL Antenna Cables

Note: Used for the Wi-Fi/Bluetooth connection with embedded models that utilize an UFL connector on the PCB.



For use with the following products (All varieties):


SocketWireless® Wi-Fi®	MultiConnect® PCIe	SocketWireless® Bluetooth®
MT810SWM-IP	MTPCIE-H5	MTS2BTSMI
	MTPCIE-H5-V-BW	

Order PN	Description	Picture
CARSMA-UFL-1F	Reverse SMA-to-UFL Coax RF Cable, 6" (1 Pk)	See Above
CARSMA-UFL-10	Reverse SMA-to-UFL Coax RF Cable, 6" (10 Pk)	See Above
CARSMA-UFL-50	Reverse SMA-to-UFL Coax RF Cable, 6" (50 Pk)	See Above

Mounting bracket for MultiConnect® rCell 100 Series cellular routers



Note: All Models supported (MTR-xx)

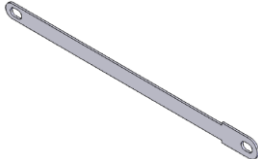
Order PN	Description	Picture
WMB-MTR	MultiConnect rCell 100 Series Mounting Bracket (MTR-xx)	

Mounting bracket for MultiModem® GPRS and CDMA and MultiConnect® Cell 100 Series Cellular Modems



For use with the following products (All varieties):

MultiModem® GPRS MultiModem® CDMA	MultiConnect® Cell
MTCBA-C1X	MTC-xx
MTCBA-G-F1	
MTCBA-G-F2	
MTCBA-G-F4	

Order PN	Description	Picture
WMB-CBA	MultiModem GPRS & CDMA Mounting Bracket (MTCBA-G-FX & C1X)	

Note: An additional hole has been added to the mounting flange to support DIN rail mounting. MTCBA-xx products will begin shipping with the additional hold at the beginning of 2Q 2014.

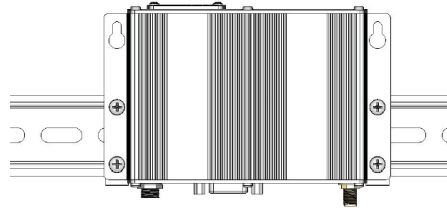
DIN Rail Mounting Kits for MultiModem® Cell, iCell and rCell MultiConnect® OCG-D Programmable Gateways



For use with the following products (All varieties):

MultiModem® rCell	MultiModem® iCell	MultiModem® Cell	MultiConnect® OCG-D
MTCBA-xx-EN2	MTCMR-xx	MTCBA-xx	MTCDP-xx

Option 1: Standard Flange Mounting



Notes: 1) Package contents include DIN Rail clips and associated hardware for mounting devices in the orientation shown above. 2) Clips onto 35mm and 32mm DIN rails

Order PN	Description	Picture
DIN-FLANGE-10PACK	DIN Rail Mounting Kit, Flange Mount (10 Pk)	

Note: An additional hole has been added to the mounting flange to support DIN rail mounting. MTCBA-xx products will begin shipping with the additional hold at the beginning of 2Q 2014.

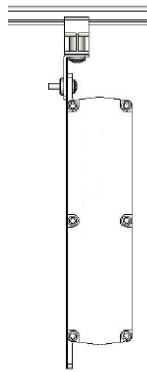
Right Angle DIN Rail Mounting Kits for MultiModem® Cell, iCell and rCell MultiConnect® OCG-D Programmable Gateways



For use with the following products (All varieties):

MultiModem® rCell	MultiModem® iCell	MultiModem® Cell	MultiConnect® OCG-D
MTCBA-xx-EN2	MTCMR-xx	MTCBA-xx	MTCDP-xx

Option 2: Right Angle Flange Mounting



Notes: 1) Package contents include DIN Rail clips and associated hardware for mounting devices in the orientation shown above. 2) Clips onto 35mm and 32mm DIN rails

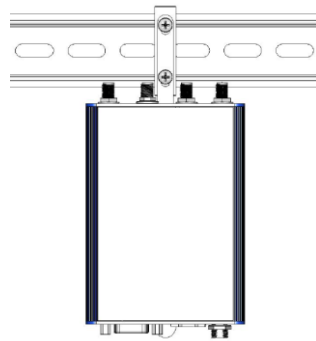
Order PN	Description	Picture
DIN-FLANGE-RA-10PACK	DIN Rail Mounting Kit, Flange Mount, Right Angle (10 Pk)	

Note: DIN rail support is available now on all MultiConnect® rCell 100 and Cell 100 series products.

DIN Rail Mounting Kits for MultiConnect® rCell 100 Series Cellular Routers MultiConnect® Cell 100 Series Cellular Modems



Note: All Models supported (MTR-xx and MTC-xx)



Notes: 1) Package contents include DIN Rail clips and associated hardware for mounting devices in the orientation shown above. 2) Clips onto 35mm and 32mm DIN rails.

Order PN	Description	Picture
DIN-MTR-MTC-10PACK	DIN Rail Mounting Kit (MTR & MTC) (10 Pk)	<p>(10) (20) (10)</p>

Table 1

MultiTech GSM Product Frequency Bands												
GSM												
HSPA				EDGE		GPRS						
	H6	H5	H4	H3	E1	E	G3	G2	G-F1	G-F2	G-F4	
3G	850	850	850	850								3G
	900	900		900								
		1700										
		1900	1900	1900								
	2100	2100	2100	2100								
2G	850	850	850	850	850	850	850	850	900	850	850	2G
	900	900	900	900	900	900	900	900				
	1800	1800	1800	1800	1800	1800	1800	1800				
	1900	1900	1900	1900	1900	1900	1900	1900				

Table 2

MultiTech CDMA Product Frequency Bands							
CDMA							
EVDO			1xRTT				
	EV3	EV2	EV1	C2	C1	C	
3G	800	800	800				3G
	1900	1900	1900				
2G	800	800	800	800	800	800	2G
	1900	1900	1900	1900	1900	1900	