

**Managed wireless connectivity for your IoT & M2M applications**



## OptConnect ema™ mPCIe Adaptor

Part Number	Description
EMA-ZZ-1-XX-Z-C	Mini PCI express adaptor for OptConnect ema™ modems

### Features

- Compatible with OptConnect ema™ modems
- Power and Status LED indicators
- Onboard USB bridge and USB 2.0 hub
- Selectable software/hardware modem On/Off/Reset control
- Provides access to all OptConnect ema™ modem communication interfaces; emaLink, modem USB & UART
- Conforms to PCI Express full mini-card rev 1.2

### Advantages

- Add AT&T/Verizon managed cellular connectivity quickly without certification costs
- Eliminate the need for custom hardware designs to integrate an OptConnect ema™ modem

The OptConnect ema™ mini PCI express (mPCIe) adaptor can be used to add smart managed cellular connectivity to any device that has an available mPCIe slot, without the cost and delay of obtaining additional certifications. Simply insert an OptConnect ema™ modem into the 20-pin interface and plug the adaptor into the device. Its out of the box, plug-and-play operation with Linux, Android, Windows 7, 8, 10, and embedded environments make for a headache free cellular experience. The mPCIe adaptor features an onboard 2x1 UART to USB bridge, and 2 port USB 2.0 hub. This allows both the modem AT interface as well as the emaLink management interface to connect with the host device over USB 2.0 as virtual comm ports. Additionally, the modem's native USB 2.0 interface is also available for use, allowing full access to the OptConnect ema™ modem, and all of its features.

Each OptConnect ema™ modem comes integrated with an industry leading suite of OptConnect managed services that include:

- OptConnect SIM cards
- Cellular data plans
- Secure connectivity monitoring and management
- Device management portal
- 24x7x365 technical support
- Warranty replacement services
- Simple ready-to-use back office API cloud integrations
- Logistics
- Fast fulfillment

## Technical Specifications (mPCIe Adaptor)

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<b>Hardware</b>	
Form Factor	Mini PCI Express Full Size
Dimensions	ema not inserted: 30 x 50.95 x 7.7 mm ema inserted: 30 x 50.95 x 12.3 mm
<b>Power</b>	
Input Voltage	2.5V to 5.5V, nominal 3.3V
I/O Voltage	2.5V - 5.5V
Max Current	1.1A @ 3.3V, 1.68A @ 2.5V, 0.8A @ 5.5V
<b>Interfaces</b>	
Type	UART(2) to USB Bridge(Virtual Comm Port), USB 2.0 Hub
USB Driver Support	USB 2.0, Linux, Windows, Android
LED Indicators	Host/System Power (Green), ema Power (Green), ema ready (Amber)
Mini PCI Express IO	WAKE#, W_DISABLE#, PERST#, LED_WWAN#
Control Mode (HW/SW)	2mm 2 pos jumper to disconnect W_DISABLE# from host system
<b>Approvals</b>	
Compliance	RoHS Compliant
<b>Temperature Range</b>	
Commercial/Industrial	0°C to +70°C
Support and Warranty	1 Year standard warranty