



M2M devices within buildings face the problem of signal shielding from the actual design of the structure and components used in the construction of the building. To overcome this problem, and provide for continuous uninterrupted RF signal at a useable level, our Direct Connected Cellular/PCS Network Compensation is specifically made for this job.

**Specifications:**

- ◆ Frequency TX 824-849 MHz, 1850-1910 MHz  
RX 869-894 MHz, 1930-1990 MHz
- ◆ Gain Up to 18 dB @ 850 MHz, Up to 24 dB at 1900 MHz
- ◆ Output Power TX 27 dBm for CDMA/30 dBm GSM  
RX 10 dBm output at 1 db compression
- ◆ Modulation CDMA, GSM, TDMA
- ◆ DC Supply voltage 9 – 18 volts D.C.
- ◆ Current draw 0.360 amps during continuous operation, initial inrush up to 0.600 amps.
- ◆ Operating temperature -30 to +60 C
- ◆ FCC: Part 15, 22 and 24.
- ◆ FCC Grant IHDA56CK1 IC Grant IC:1090-SYN9528
- ◆ Dimensions: 5.30 inches by 4.56 inches by 1.32 inches (134.62 mm x 115.82 mm x 33.53 mm)
- ◆ RF Connectors: mini UHF

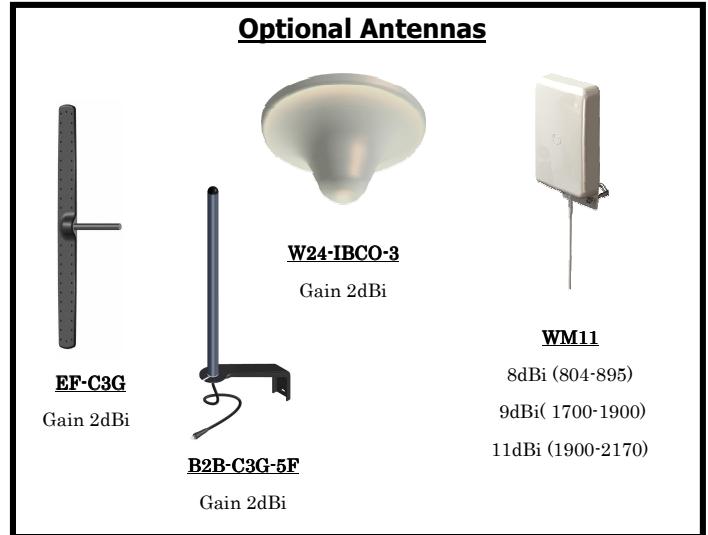
The amplifier has internal circuitry to work together with the output and input signal of the cellular/PCS modem chip in the device without any harm to the modem or our device. In addition, it enhances the signal with additional filtration, to prevent the loss of data from either the uplink or downlink side. The unit works with all of the present 800/1900 protocol's in operation in the US and Canadian marketplaces.

Oscillation condition occurs if the antennas are placed in such a way that the antenna isolation is not 5 to 10 db greater than the amplifier gain. The B800-1900-WU unit has an internal pad to prevent damage to the unit from very high input power, and to prevent the unit from going into oscillation.

The gain levels of the uplink and downlink sides are preset at the factory at the time of manufacture for optimum performance, and reliability. Every unit is visually inspected, and then powered up, and placed in a full test bed and checked under no, partial and full loads to guarantee that the amplifier is operating at the correct specifications, and will be operational without fail for a very long period of time.



**B800-1900-WU Kit**



### **Features:**

- ◆ Manufactured specifically to operate directly connected to a M2M device or other cellular/PCS device.
- ◆ This Direct Connect unit is lower in cost than the inductive/wireless unit.
- ◆ Direct Connect unit has a protected input section to prevent damage from the direct connection of a cellular/PCS output device
- ◆ Unit has been production for over 15 years and has been in operation in all types of harsh environments.
- ◆ Unit can be remotely controlled with standard separate control input.
- ◆ Unit is very efficient in power consumption using less than 0.30 milliamperes of current at 9 -12 volts D.C.
- ◆ Unit operates under FCC Grant IHDA56CK1 and IC Grant IC:1090-SYN9528
- ◆ Manufactured under license from Motorola Mobility, Inc.

### **Standard Package:**

- ◆ Amplifier
- ◆ Attachment input cable from M2M device to amplifier. SMA and mini UHF connectors on RG58 cable 14 inches long. (35.56 mm)
- ◆ DC power cable with remote control wire
- ◆ Window pickup antenna
- ◆ Instruction booklet
- ◆ 120 volt AC power supply with DC output and JAE connection to amplifier

### **Optional Features:**

- ◆ Inductive pickup for M2M devices that do not have a SMA connection for an external antenna.
- ◆ Longer connection cable between the M2M device and the amplifier.
- ◆ RG174 cable on the interconnection instead of the RG58 cable
- ◆ External high gain antenna for the amplifier with longer cable. For very low signal areas
- ◆ Works with standard 50 ohm input and special output antennas and devices, and can be compatible with "N", TNC, mini-UHF, FME, SMA,