



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 Cellular/PCS Signal Enhancer is specifically made for this job.

### **Specifications**

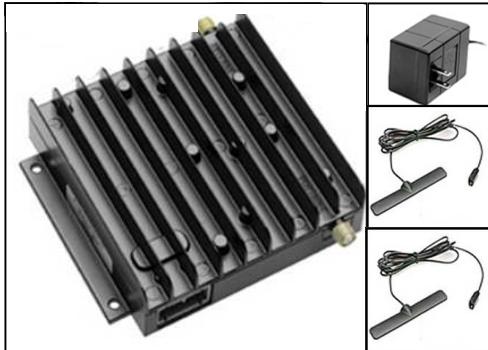
- ◆ Frequency TX 824-849 MHz, 1850-1910 MHz
- ◆ RX 869-894 MHz, 1930-1990 MHz
- ◆ Gain Up to 50db @ 850 MHz, Up to 50db at 1900 MHz
- ◆ Output Power TX 27 dBm for CDMA/30 dBm GSM
- ◆ RX 10 dBm output at 1 db compression
- ◆ Modulation; CDMA, GSM, TDMA
- ◆ DC input voltage 9 -18 volts D.C.
- ◆ Average current draw: 0.500 amps during continuous operation, initial inrush up to 0.600 amps.
- ◆ Operating temperature: -30c to +60c
- ◆ FCC: Part 15, 22, and 24
- ◆ Dimensions: 5.30 inches by 4.56 inches by 1.32 inches (134.62 mm x 115.82 mm x 33.53 mm)
- ◆ Connectors: Farka male and female, 50 ohm
- ◆ Manufactured specifically to operate wireless with a M2M device or other cellular/PCS device
- ◆ Inductive internal antenna must be positioned within 1/2 inch of M2M exterior antenna

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. 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 supplied antennas are placed in such a way that the antenna isolation is not 5 to 10 db greater than the amplifier gain. The B800-1900-2 unit has very impressive ADAPT™ software in conjunction with an internal microprocessor which allows the unit to keep the gain of the unit under control at all times. This software sets up the system at power up and does not allow the gain to go above that predetermined level; it also constantly monitors and controls the gain for changes which may occur in the environment. The B800-1900-2 unit has a tri colored LED indicator which changes color based upon the signal conditions from the uplink and downlink antennas. This is the indication of the level of gain of the amplifier in real time. In green, there is a normal level to full power. In yellow, the power level is reduced, but the unit is still operational at this reduced level. Red illumination indicates a condition of the amplifier will reduce its gain to almost zero to prevent oscillation.



### B800-1900-2 Kit



### Optional Antennas



### Features:

- ◆ Unit has an anti oscillation circuit to protect the unit from off frequency and producing distortion on the network so the unit appears transparent to the network.
- ◆ Unit has been production for over 8 years and has been in operation in all types of harsh environments.
- ◆ Unit operates under an FCC Grant, UP9B800-1900-2
- ◆ Unit is manufactured under license from Motorola Mobility, Inc.
- ◆ Very low current draw, 0.500 milliamperes at 9 volts D.C. for high efficiency of operation
- ◆ Works with standard 50 ohm input and special output antennas and devices, and can be compatible with "N", TNC, mini-UHF, FME, SMA, MCX, MMCX and U.FL connectors.

### Standard Package:

Amplifier, with keyed inputs for the uplink and downlink antennas, and keyed input for the DC power source to prevent accidental mistakes in connection.

- ◆ Inductive pickup antenna: This antenna, which when placed on the top of the M2M antenna, will provide the input signal to the amplifier. This antenna cable has a 3 meter cable length, and has ultra low loss RG174 cable. This antenna has a gain of 2 dBi.
- ◆ 120 volt AC power supply with 9 volt DC output
- ◆ Window uplink antenna has a 3 meter length of ultra low loss RG174 cable, and gain of 2 dBi.
- ◆ Instruction booklet

### Optional Features:

- ◆ Extension cables for the inductive pickup antenna
- ◆ Extension cable for the window uplink antenna
- ◆ Extension cable for the AC to DC power supply
- ◆ External high gain Omni directional antenna for use in very low signal areas. Antenna has a rated gain of 3 dBi, and is complete with 10 meters of ultra low loss RG58 cable.
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Products are marketed by: Licensed Products, LLC., 9695 135th St, Seminole, FL 33776 - 1-877-822-7887

Products are manufactured by I.W.R.E., Inc., under license from Motorola Mobility, Inc.