

|   |   |                              |                             |                    |
|---|---|------------------------------|-----------------------------|--------------------|
|  | <b>Single Band Mini Booster</b><br><b>For CDMA 800MHz or GSM 900MHz or</b><br><b>DCS1800MHz or UMTS 2100MHz</b> | <b>Code : PW-MB10-Series</b> |                             |                    |
|   |   | <b>Rev</b><br>1              | <b>Issued</b><br>27/03/2009 | <b>Page</b><br>1/3 |

## Single Band +10dBm Mini Booster (MB10 SERIES)

### > Introduction

Mini Booster is an ideal solution to provide a cost effective improvement in cellular coverage up to 100-300 m2, such as home, small office, VIP room, shop or restaurant.

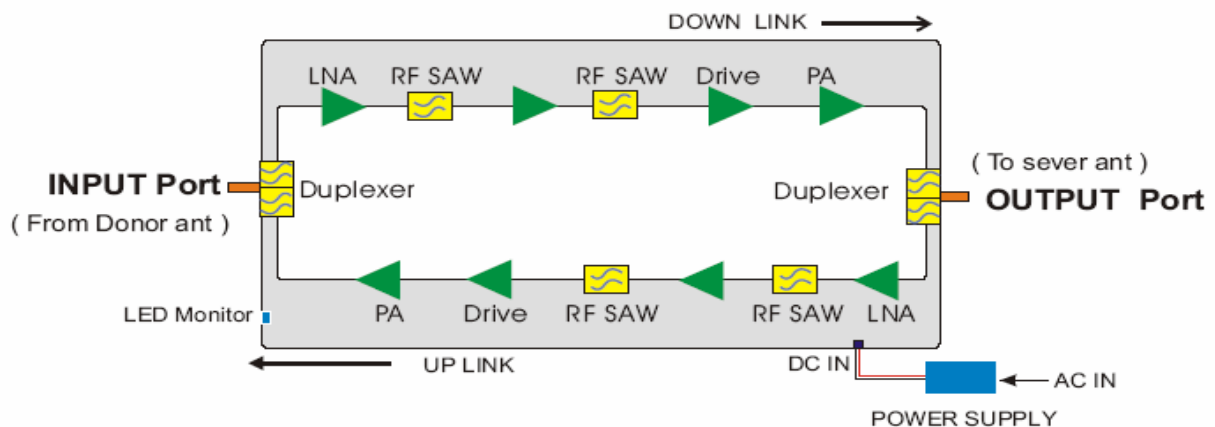


- Compact Design & Light Weight make it easy to install.
- Simple maintenance with LED Indication as operation status.
- Wideband (at its frequency band) feature enables to provide indoor coverage from Multi Cellular Operator.
- Support up to 30 users/calls simultaneously.
- Better Signal Performance will extend Handset Battery Life.
- A fast & instant solution to achieve customer satisfaction.
- Low Electrical Power Consumption (18 Watt)

### Application <



### Block Diagram <



|   |   |                              |                             |                    |
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## Specification

| Description                |          | Frequency Range  |               |
|----------------------------|----------|--|---------------|
| Booster Model              | Band     | UPLINK   | DOWN LINK     |
| PW-MB10-800                | CDMA800  | 824~849MHz   | 869~894MHz    |
| PW-MB10-900                | GSM 900  | 890~915 MHz  | 935~960 MHz   |
| PW-MB10-1800               | DCS 1800 | 1710 ~1775 MHz   | 1805~1870 MHz |
| Band Width                 | CDMA800  | 25Mhz  |               |
|                            | GSM 900  | 25Mhz  |               |
|                            | DCS 1800 | 65Mhz  |               |
| Max Gain                   |          | $\geq 55-60$ dB  |               |
| Gain Flatness              | CDMA800  | 8 dB   |               |
|                            | GSM 900  | 8 dB   |               |
|                            | DCS 1800 | 10 dB  |               |
| Manual Gain Control/MGC    |          | $>15$ dB   |               |
| Maximum Input Power        |          | 0dBm   |               |
| Output Power               |          | UL $\geq 5$ dBm, DL $\geq 10$ dBm                        |               |
| Inter-modulation           |          | 9KHz~1GHz $\leq -36$ dBm<br>1GHz~12.75GHz $\leq -30$ dBm |               |
| Spurious Emission          |          | 9KHz~1GHz $\leq -36$ dBm<br>1GHz~12.75GHz $\leq -30$ dBm |               |
| Noise Figure               |          | $\leq 5$ dB  |               |
| Group Delay                |          | $\leq 0.5$ micro Sec                                     |               |
| Impedance                  |          | 50 $\Omega$  |               |
| Power Supply               |          | Transformer : Input 220VAC, 50Hz, Output 9Volt / 2Amp    |               |
| Operating Temperature      |          | -10 to +50 $^{\circ}$ C                                  |               |
| RF Connector / Environment |          | SMA (Female) / IP 40                                     |               |
| Dimension / Weight         |          | 183*128* 45.5mm / $\leq 1$ Kg                            |               |
| <b>LED Indicators</b>      |          |  |               |
| Power ON/ OFF              |          | ON/ OFF  |               |
| Input Singnal Levels       |          | -50 dBm or more  |               |
| Normal                     |          | At the edge of green and orange                          |               |
| Low                        |          | Green  |               |
| High                       |          | $>1-5$ dB range: Orange; $>20$ dB: Red                   |               |

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## Specification

| Booster Model :<br>PW-MB10-2100 | UPLINK  | DOWN LINK    |
|---------------------------------|---|--------------|
| Frequency Range                 | 1920~1970MHz  | 2110~2170MHz |
| Band Width                      | 60MHz   |              |
| Max Gain                        | ≥ 55dB  |              |
| Gain Flatness                   | 6-8dB   |              |
| MANUAL Gain Control (MGC)       | >15dB   |              |
| Maximum Input Power             | 0dBm  |              |
| Output Power                    | UL ≥5dBm, DL ≥10dBm                                   |              |
| Inter-modulation                | Complies with 3GPP TS 25.106                          |              |
| Spurious Emission Mask          | Complies with 3GPP TS 25.106                          |              |
| Spurious Emission               | Complies with 3GPP TS 25.106                          |              |
| Modulation Accuracy             | Complies with 3GPP TS 25.106                          |              |
| Peak Code Domain Error          | Complies with 3GPP TS 25.106                          |              |
| ACRR                            | ≥30dB @±5MHz&±10MHz                                   |              |
| Frequency Stability             | ≤0.01ppm  |              |
| Noise Figure                    | ≤5dB  |              |
| Group Delay                     | ≤0.5 micro Sec  |              |
| Impedance                       | 50 Ω  |              |
| Electrical Power Supply         | Transformer : Input 220VAC, 50Hz, Output 9Volt / 2Amp |              |
| Operating Temperature           | -10 to +50°C  |              |
| RF Connector / Environment      | SMA (Female) / IP 40                                  |              |
| Dimension / Weight              | 183*128* 45.5mm / ≤1Kg                                |              |
| <b>LED Indicators</b>           |   |              |
| Power ON/ OFF                   | ON/ OFF   |              |
| Input Signal Levels             | -45 to -50 dBm or more                                |              |
| Normal                          | At the edge of green and orange                       |              |
| Low                             | Green   |              |
| High                            | >1-5dB range: Orange; >20dB: Red                      |              |