



## **Breeze Compact 2.3G**

### **Technical Description**

Breeze Compact 2.3G Base station is a high capacity, IP services oriented Broadband Wireless Access system. Breeze Compact 2.3G is digital modulated TDD system covering 2305-2315 MHz and 2350-2360 MHZ range. The system contains an all outdoor base station unit.

The basic base station system configuration is contains power supply, MODEM and based on RF IC radio.

The following describes the transmit path and receive path of the Breeze Compact 2.3G.

Note: The ODU consists of four identical RF radio paths based on two identical RF IC chipsets, all paths terminated with antenna ports.

Only two radio paths that based on one RF IC are described in the detailed block diagram.

The DC voltage applied to the final RF amplifying device is 28VDC.

#### **Transmit mode:**

The signal flow in transmit mode is as followed. The IQ signal passes from the Modem to radio part, and converted to required RF frequency by RF IC then the signal passes thru combo Balun+BPF, GVA-63+ and MGA635P8 amplifiers, amplified again by MGA-22033, then passes thru cable to high power card and amplified again by BLF6G27-10G and BLF7G27L-90P.

The amplified signal passes thru circulator and cavity filter (2305-2315MHz and 2350-2360MHz) directly to antenna port.

#### **Receive mode:**

The signal flow in the receive mode is as followed. The unit antenna receives the signal . The received signal passes thru cavity filter (2305-2315MHz and 2350-2360MHz), circulator and TX/RX switch. The LNA MGA635P8, combo Balun+BPF directly to the RF IC, converted to IQ signal and directed to the Modem.