

# Operation Description

## Forward Direction Block Explanation

Signals from BTS are received via the repeater's donor antenna. These signals are then filtered through the BPF (Band Pass Filter) and enter into the DPDT RF switch as inputs. Within the DPDT switch, down link and up link paths are switched alternately. In a down link switching state, signals are sent to LNA where low noise amplifications are applied and sent to the Up/Down Converter. At the converter, only the relevant bands are passed through the SAW filter and forwarded to the HPA. HPA amplifies these signals to high output and passes it through to the DPDT switch and BPF. The signals finally radiate out the service antenna.

## Reverse Direction Block Explanation

Signals from PSS (Portable Subscriber Station) are received via repeater's service antenna. These signals are then filtered through the BPF (Band Pass Filter) and enter into the DPDT RF switch as inputs. Within the DPDT switch, down link and up link paths are switched alternately. In an up link switching state, signals are sent to LNA where low noise amplifications are applied and sent to the Up/Down Converter. At the converter, only the relevant bands are passed through the SAW filter and forwarded to HPA. HPA amplifies these signals to high output and passes it through to the DPDT switch and BPF. The signals finally radiate out the donor antenna.

