









2. Specification

A. Electrical Specification

Item		Specification	Remark
CDMA Frequency Range	Forward	869 MHz ~ 894 MHz	
	Reverse	824 MHz ~ 849 MHz	
PCS Frequency Range	Forward	1930 MHz ~ 1990 MHz	
	Reverse	1850 MHz ~ 1910 MHz	
CDMA Bandwidth	Forward	25 MHz	
	Reverse	25 MHz	
PCS Bandwidth	Forward	60 MHz	
	Reverse	60 MHz	
CDMA Input Level	Forward	Above than -60 dBm / 20 FA	
	Reverse	Above than -57 dBm / 1 FA	
PCS Input Level	Forward	Above than -58 dBm / 20 FA	
	Reverse	Above than -65 dBm / 1 FA	
CDMA Output Level	Forward	10 dBm / 20 FA	
	Reverse	13 dBm / 1 FA	
PCS Output Level	Forward	12 dBm / 20 FA	
	Reverse	15 dBm / 1 FA	
Gain	Adjust Range	40 dB ~ 70 dB	ALC OFF
	Step	1 dB	
	Accuracy	± 1 dB	
ALC Range		30 dB	ALC ON
ALC Level		Setting up	
ALC Response Time		Setting up (Default : 300ms)	
CDMA Gain Flatness		Less than 4 dBp-p	
PCS Gain Flatness		Less than 7 dBp-p	
Over-power Shutdown	Forward	Setting up	
	Reverse	Setting up	
In-band Spurious Emission		29 dBc @ Fc ± 750 kHz	RBW : 30 kHz
		39 dBc @ Fc ± 1.98 MHz	
Out of Band Spurious Emission		Under -13 dBm/30 kHz @ 9 kHz ~ 150 kHz Under -13 dBm/30 kHz @ 150 kHz ~ 30 MHz Under -13 dBm/30 kHz @ 30 MHz ~ 1 GHz Under -13 dBm/30 kHz @ 1 GHz ~ 12.75 GHz	
Noise Figure	Forward	Less than 9 dB	@ max gain
	Reverse	Less than 7 dB	@ max gain
Delay		Less than 5 us	
TX/RX Isolation		Above than 85 dB	

Item		Specification	Remark
VSWR @ ANT Port		Max. 1:1.5	@ 50 ohm
Impedance @ ANT Port		50 ohm	
Antenna Connectors	Link ANT Port	Type-N Female	
	Service ANT Port	Type-N Female	
Power Supply		100 ~ 240 Vac @ 50/60Hz	
Operating Temperature		-5 °C ~ 55 °C	
Delta-T		Less than 20 °C	
GUI Interface		RS-232C	
Water-proof		No	

B. Front LED Display

항목	LED state	Description
Power LED		Power OFF
		Power ON
Signal LED (Forward RSSI Level)		Less than -80dBm / 20FA
		-60dBm / 20FA to -80dBm / 20FA
		Above than -60dBm / 20FA
Alarm LED		Checking isolation between link and service antennas
		Normal Operation
		Shutdown by OverPower or Oscillation

C. Mechanical Specification

- i. Power Consumption : 25W
- ii. Operating Temperature : -5 °C ~ +55 °C
- iii. Operating Humidity : 5 ~ 95%
- iv. Dimension : 203mm x 293mm x 58mm
- v. Weight : 4.5kg

3. Structure

A. Inter/Outer Structure

i. Outer Structure

- a. The RF Repetition System is Constructed by Link Antenna, Service Antenna, and the Repeater.

ii. Internal Structure

- a. The Repeater is constructed by Multiplexer, RF module, Controller, and the Power Supply Block.
- b. The Block Diagram of a This Repeater is following. Link port is connected to a link antenna which transmits and receivers to BTS. Service port is connected to a service antenna which transmits and receivers to MS. (mobile phone)

