

900+1800+2100MHz Band-adjustable Digital Repeater

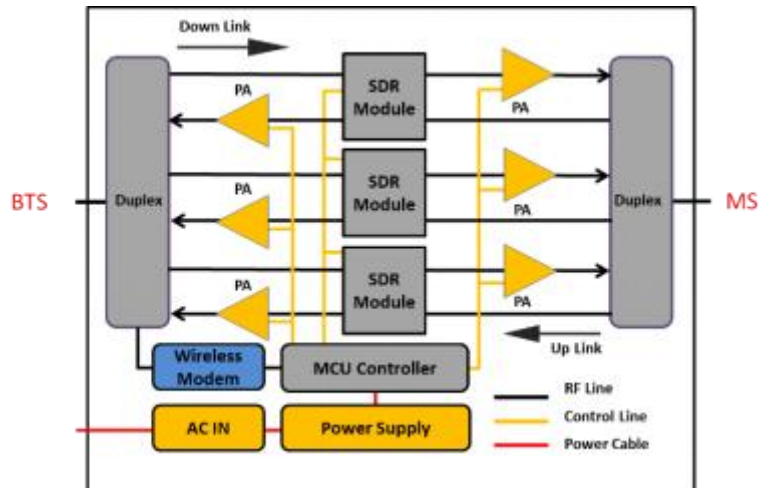
Model: AT-900/1800/2100

Product Features:

- Digital bandwidth-adjustable features allow for seamless adaptability to different frequency bands.
- LCD display the input/output signal strength.
- Auto isolation detection.
- Improve any three mobile networks at the same time.
- Built-in Auto Gain Control (AGC)& Auto Level Control (ALC).
- Center frequency movable.
- OMS Lite for remote/local control and monitoring(Optional)



Working Schematic Diagram



Application Scenario:



Technical Specifications:

P/N: AD-900/1800		B1 (2100MHz)	B3 (1800MHz)	B8 (900MHz)
Frequency Range(adjustable)	Uplink	1920 - 1980MHz	1710 - 1785 MHz	880-915 MHz
	Downlink	2110 - 2170 MHz	1805 - 1880 MHz	925-960MHz
Sub-bands	Uplink	1920-1940MHz	1710 - 1730 MHz	900-910 MHz
	Downlink	2110 - 2130 MHz	1805 - 1825 MHz	945-955MHz
Number of Sub-bands		1	1	1
Bandwidth (adjustable)		$\leq 20 \text{ MHz}/0.2\text{MHz}$	$\leq 20 \text{ MHz}/0.2\text{MHz}$	$\leq 20\text{MHz}/0.2\text{MHz}$
Max. Gain	Uplink	$\geq 65\pm 3 \text{ dB}$	$\geq 65\pm 3 \text{ dB}$	$\geq 65\pm 3 \text{ dB}$
	Downlink	$\geq 70\pm 3 \text{ dB}$	$\geq 70\pm 3 \text{ dB}$	$\geq 70\pm 3 \text{ dB}$
Manual Gain Control		31 dB in step of 1 dB		
Automatic Gain Control		$\geq 20 \text{ dB}$		
Gain Flatness (per sub-band)		$\leq \pm 3 \text{ dB (peak-to-peak)}$	$\leq \pm 3 \text{ dB (peak-to-peak)}$	$\leq \pm 3 \text{ dB (peak-to-peak)}$
Max. Input Power Without Damage		0 dBm		
Output Power	Uplink	$\geq 17\pm 2 \text{ dBm}$	$\geq 17\pm 2 \text{ dBm}$	$\geq 17\pm 2 \text{ dBm}$
	Downlink	$\geq 20\pm 2 \text{ dBm}$	$\geq 20\pm 2 \text{ dBm}$	$\geq 20\pm 2 \text{ dBm}$
Out of Band Gain	$2,5 \leq f_{\text{offset_CW}} < 5,0 \text{ MHz}$	$\leq 60 \text{ dB}$	$\leq 60 \text{ dB}$	$\leq 60 \text{ dB}$
	$5,0 \leq f_{\text{offset_CW}} < 10,0 \text{ MHz}$	$\leq 45 \text{ dB}$	$\leq 45 \text{ dB}$	$\leq 45 \text{ dB}$
	$10,0 \text{ MHz} \leq f_{\text{offset_CW}}$	$\leq 35 \text{ dB}$	$\leq 35 \text{ dB}$	$\leq 35 \text{ dB}$
Spurious Emission	9KHz-1GHz	$\leq -36\text{dBm}$		
	1GHz-12.75GHz	$\leq -30\text{dBm}$		
ACRR	$\pm 20/100\text{MHz}$	$\leq -36\text{dBc}/30\text{KHz}$	$\leq -36\text{dBc}/30\text{KHz}$	$\leq -36\text{dBc}/30\text{KHz}$
	$\pm 40/200\text{MHz}$	$\leq -40\text{dBc}/30\text{KHz}$	$\leq -40\text{dBc}/30\text{KHz}$	$\leq -40\text{dBc}/30\text{KHz}$
EVM		$\leq 8\%$	$\leq 8\%$	$\leq 8\%$
Frequency Stability		$\leq \pm 0.01 \text{ ppm}$	$\leq \pm 0.01 \text{ ppm}$	$\leq \pm 0.01 \text{ ppm}$
Noise Figure		$\leq 6 \text{ dB}$		
VSWR		≤ 1.8		
System Delay		$\leq 4.5 \mu\text{s}$		
RF Connector		N-Female		
Impedance		50 Ω		
Power Supply		AC 100/ 240 V		
Power Consumption		$\leq 75 \text{ W}$		
Dimensions		234*230*52mm		
Weight		$\leq 3\text{kgs}$		
IP Rating		IP65		
Operating Temperature		$-25 \text{ }^\circ\text{C}$ to $55 \text{ }^\circ\text{C}$		
Control & Monitoring	Local	USB/Type-C port/WIFI		

Technical specification is subject to change without prior notice.