



Digital Repeater

Product Catalog



Dual Band-adjustable Digital Pico Repeater

Model: 42012D (P/N: 42012D.820)

Product Features

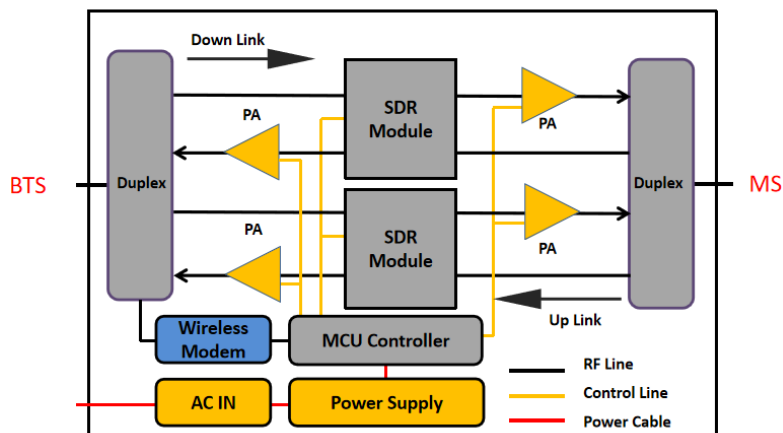
- Multi-band support offers flexibility to meet various network demands.
- Fine-grained control is achieved through individual sub-band activation/deactivation.
- Intelligent algorithms effectively mitigate uplink interference.
- Independent gain control further optimizes performance.
- Self-control mechanisms minimize interference during new base station deployments.
- NMS facilitates remote/local control and monitoring.



Application Scenario



Block Diagram



Technical specifications are subject to change without prior notice.



Technical Specifications

P/N: 42012D.820		B20 (800)	B8 (900)
Frequency Range	Uplink	832-862 MHz (adjustable)	880-915 MHz (adjustable)
	Downlink	791-821 MHz (adjustable)	925-960 MHz (adjustable)
Number of Sub-bands		1-3	1-3
Bandwidth per Sub-band		5-30 MHz (adjustable)	0.2-35 MHz (adjustable)
Max. Gain	Uplink	70±3 dB	70±3 dB
	Downlink	75±3 dB	75±3 dB
Manual Gain Control		31 dB in step of 1 dB	
Automatic Gain Control		≥ 20 dB	
Gain Flatness (per sub-band)		≤ ±3.5 dB (peak-to-peak)	
Max. Input Power Without Damage		-10 dBm	
Output Power	Uplink	20±2 dBm	20±2 dBm
	Downlink	20±2 dBm	20±2 dBm
Out of Band Gain	2.5≤f_offset_CW< 5.0 MHz	≤60 dB	
	5.0≤f_offset_CW<10.0 MHz	≤45 dB	
	10.0 MHz≤f_offset_CW	≤35 dB	
Spurious Emission	9KHz-1GHz	≤ -36dBm	
	1GHz-12.75GHz	≤ -30dBm	
ACLR	4G: ±20MHz	≤ -40dBc	
	5G: ±100MHz	≤ -40dBc	
EVM		≤ 8%	≤ 8%
Frequency Stability		≤ ±0.01 ppm	
Noise Figure		≤ 8 dB	
VSWR		≤ 2	
System Delay		≤ 8 μs	
RF Connector		N-Female	
Impedance		50 Ω	
Power Supply	Input	AC 100~240 V, 50/ 60 Hz	
	Output	DC 24 V/ 2.5 A	
Power Consumption		≤ 65 W	
Dimensions		330*490*120 mm	
Weight		≤ 7 kg	
IP Rating		IP40	
Operating Temperature		-10 °C to 50 °C	
NMS	Local	Via RJ45	
	Remote	Via Cloud-based NMS (optional)	

Technical specifications are subject to change without prior notice.



Triple Band-adjustable Digital Pico Repeater

Model: 42013D (P/N: 42013D.138)

Product Features

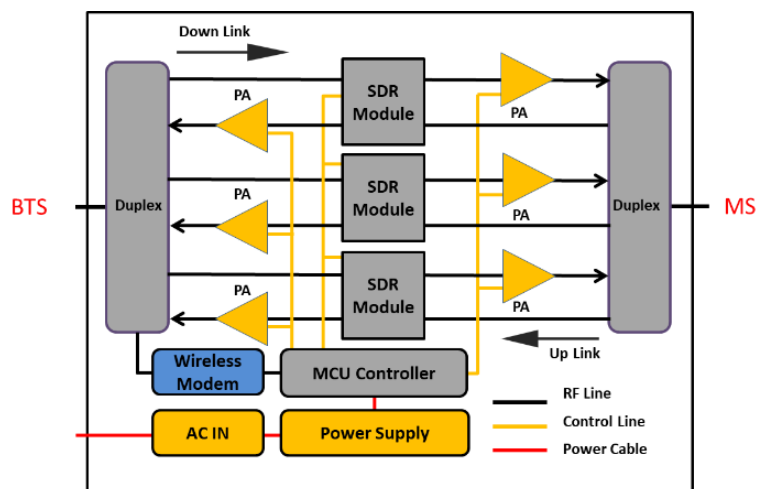
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- Fine-grained control is achieved through individual sub-band activation/deactivation.
- Intelligent algorithms effectively mitigate uplink interference.
- Independent gain control further optimizes performance.
- Self-control mechanisms minimize interference during new base station deployments.
- NMS facilitates remote/local control and monitoring.



Application Scenario



Block Diagram



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Technical Specifications

P/N: 42013D.138		B8 (900)	B3 (1800)	B1 (2100)
Frequency Range (adjustable)	Uplink	880-915 MHz	1710-1785 MHz	1920-1980 MHz
	Downlink	925-960 MHz	1805-1880 MHz	2110-2170 MHz
Number of Sub-bands		1-3	1-3	1-3
Bandwidth per Sub-band (adjustable)		0.2-35 MHz	5-75 MHz	5-60 MHz
Max. Gain	Uplink	70±3 dB	70±3 dB	70±3 dB
	Downlink	75±3 dB	75±3 dB	75±3 dB
Manual Gain Control		31 dB in step of 1 dB		
Automatic Gain Control		≥ 20 dB		
Gain Flatness (per sub-band)		≤ ±3.5 dB (peak-to-peak)		
Max. Input Power Without Damage		-10 dBm		
Output Power	Uplink	20±2 dBm	20±2 dBm	20±2 dBm
	Downlink	20±2 dBm	20±2 dBm	20±2 dBm
Out of Band Gain	2.5≤f_offset_CW<5.0 MHz	≤60 dB		
	5.0≤f_offset_CW<10.0 MHz	≤45 dB		
	10.0 MHz≤f_offset_CW	≤35 dB		
Spurious Emission	9KHz-1GHz	≤ -36dBm		
	1GHz-12.75GHz	≤ -30dBm		
ACLR	4G: ±20MHz	≤-40dBc		
	5G: ±100MHz	≤-40dBc		
EVM		≤ 8%	≤ 8%	≤ 8%
Frequency Stability		≤±0.01 ppm		
Noise Figure		≤ 8 dB		
VSWR		≤ 2		
System Delay		≤ 8 μs		
RF Connector		N-Female		
Impedance		50 Ω		
Power Supply	Input	AC 100~240 V, 50/ 60 Hz		
	Output	DC 24 V/ 4.2 A		
Power Consumption		≤ 65 W		
Dimensions		330*490*120 mm		
Weight		≤ 10kg		
IP Rating		IP40		
Operating Temperature		-10 °C to 50 °C		
NMS	Local	Via RJ45		
	Remote	Via Cloud-based NMS (optional)		

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Quad Band-adjustable Digital Pico Repeater

Model: 42014D (P/N: 42014D.13820)

Product Features

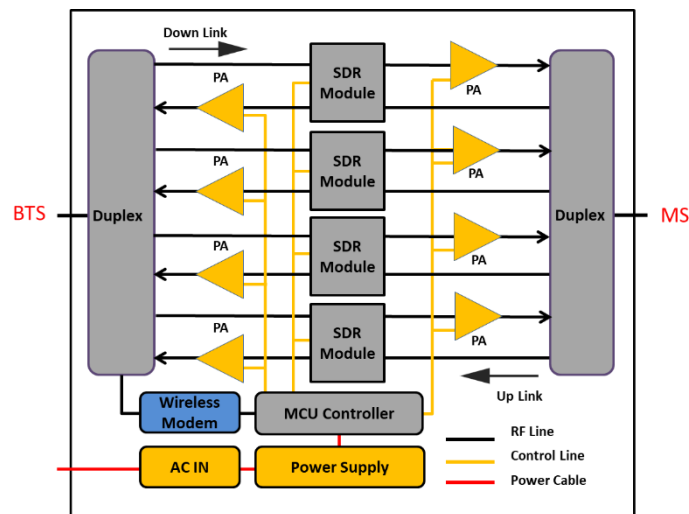
- Multi-band support offers flexibility to meet various network demands.
- Fine-grained control is achieved through individual sub-band activation/deactivation.
- Intelligent algorithms effectively mitigate uplink interference.
- Independent gain control further optimizes performance.
- Self-control mechanisms minimize interference during new base station deployments.
- NMS facilitates remote/local control and monitoring.



Application Scenario:



Block Diagram



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Technical Specifications

P/N: 42014D.13820		B20 (800)	B8 (900)	B3 (1800)	B1 (2100)
Frequency Range (adjustable)	Uplink	832-862 MHz	880-915 MHz	1710-1785 MHz	1920-1980 MHz
	Downlink	791-821 MHz	925-960 MHz	1805-1880 MHz	2110-2170 MHz
Number of Sub-bands		1-3	1-3	1-3	1-3
Bandwidth per Sub-band (adjustable)		5-30 MHz	0.2-35 MHz	5-75 MHz	5-60 MHz
Max. Gain	Uplink	70±3 dB	70±3 dB	70±3 dB	70±3 dB
	Downlink	75±3 dB	75±3 dB	75±3 dB	75±3 dB
Manual Gain Control		31 dB in step of 1 dB			
Automatic Gain Control		≥ 20 dB			
Gain Flatness (per sub-band)		≤ ±3.5 dB (peak-to-peak)			
Max. Input Power Without Damage		-10 dBm			
Output Power	Uplink	20±2 dBm	20±2 dBm	20±2 dBm	20±2 dBm
	Downlink	20±2 dBm	20±2 dBm	20±2 dBm	20±2 dBm
Out of Band Gain	2.5≤f_offset_CW<5.0 MHz	≤60 dB			
	5.0≤f_offset_CW<10.0 MHz	≤45 dB			
	10.0 MHz≤f_offset_CW	≤35 dB			
Spurious Emission	9KHz-1GHz	≤ -36dBm			
	1GHz-12.75GHz	≤ -30dBm			
ACLR	4G: ±20MHz	≤-40dBc			
	5G: ±100MHz	≤-40dBc			
EVM		≤ 8%	≤ 8%	≤ 8%	≤ 8%
Frequency Stability		≤±0.01 ppm			
Noise Figure		≤ 8 dB			
VSWR		≤ 2			
System Delay		≤ 8 μs			
RF Connector		N-Female			
Impedance		50 Ω			
Power Supply	Input	AC 100~240 V, 50/ 60 Hz			
	Output	DC 24 V/ 4.2 A			
Power Consumption		≤ 65 W			
Dimensions		330*490*120 mm			
Weight		≤ 10kg			
IP Rating		IP40			
Operating Temperature		-10 °C to 50 °C			
NMS	Local	Via RJ45			
	Remote	Via Cloud-based NMS (optional)			

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Dual Band-adjustable Digital Micro Repeater

Model: 42712D (P/N: 42712D.13)

Product Features

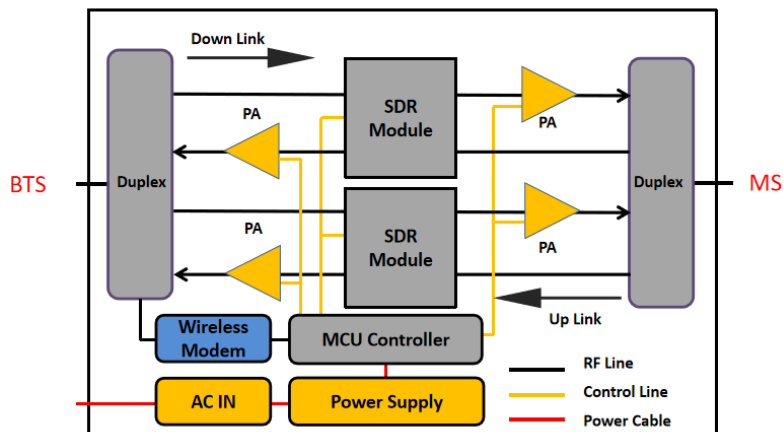
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- Fine-grained control is achieved through individual sub-band activation/deactivation.
- Intelligent algorithms effectively mitigate uplink interference.
- Independent gain control further optimizes performance.
- Self-control mechanisms minimize interference during new base station deployments.
- NMS facilitates remote/local control and monitoring.



Application Scenario



Block Diagram



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Technical Specifications

P/N: 42712D.13		B3 (1800)	B1 (2100)
Frequency Range (adjustable)	Uplink	1710-1785 MHz	1920-1980 MHz
	Downlink	1805-1880 MHz	2110-2170 MHz
Number of Sub-bands		1-3	1-3
Bandwidth per Sub-band (adjustable)		5-75 MHz	5-60 MHz
Max. Gain	Uplink	75±3 dB	75±3 dB
	Downlink	80±3 dB	80±3 dB
Manual Gain Control		31 dB in step of 1 dB	
Automatic Gain Control		≥ 20 dB	
Gain Flatness (per sub-band)		≤ ±3.5 dB (peak-to-peak)	
Max. Input Power Without Damage		-10 dBm	
Output Power	Uplink	20±2 dBm	20±2 dBm
	Downlink	27±2 dBm	27±2 dBm
Out of Band Gain	2.5≤f_offset_CW<5.0 MHz	≤60 dB	
	5.0≤f_offset_CW<10.0 MHz	≤45 dB	
	10.0 MHz≤f_offset_CW	≤35 dB	
Spurious Emission	9KHz-1GHz	≤ -36dBm	
	1GHz-12.75GHz	≤ -30dBm	
ACLR	4G: ±20MHz	≤-40dBc	
	5G: ±100MHz	≤-40dBc	
EVM		≤ 8%	≤ 8%
Frequency Stability		≤ ±0.01 ppm	
Noise Figure		≤ 8 dB	
VSWR		≤ 2	
System Delay		≤ 8 μs	
RF Connector		N-Female	
Impedance		50 Ω	
Power Supply	Input	AC 100~240 V, 50/ 60 Hz	
	Output		
Power Consumption		≤ 85 W	
Dimensions		330*490*120 mm	
Weight		≤ 12kg	
IP Rating		IP40	
Operating Temperature		-10 °C to 50 °C	
NMS	Local	Via RJ45	
	Remote	Via Cloud-based NMS (optional)	

Technical specifications are subject to change without prior notice.



Triple Band-adjustable Digital Micro Repeater

Model: 42713D (P/N: 42713D.3820)

Product Features

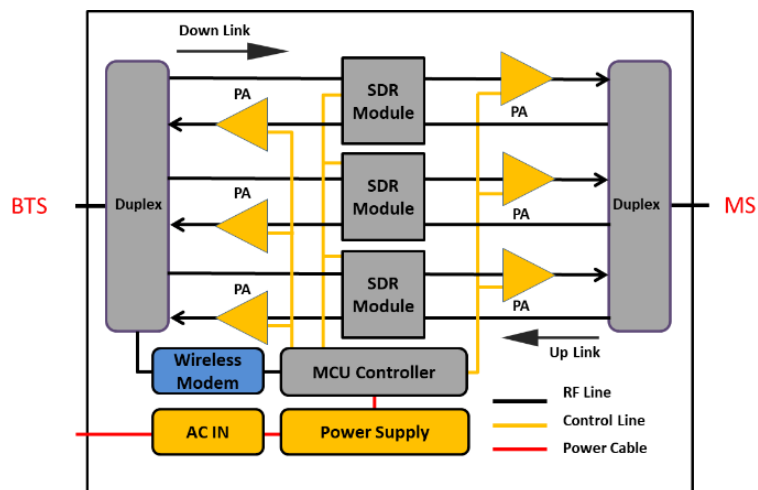
- Multi-band support offers flexibility to meet various network demands.
- Fine-grained control is achieved through individual sub-band activation/deactivation.
- Intelligent algorithms effectively mitigate uplink interference.
- Independent gain control further optimizes performance.
- Self-control mechanisms minimize interference during new base station deployments.
- NMS facilitates remote/local control and monitoring.



Application Scenario



Block Diagram



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Technical Specifications

P/N: 42713D.3820		B20 (800)	B8 (900)	B3 (1800)
Frequency Range (adjustable)	Uplink	832-862 MHz	880-915 MHz	1710-1785 MHz
	Downlink	791-821 MHz	925-960 MHz	1805-1880 MHz
Number of Sub-bands		1-3	1-3	1-3
Bandwidth per Sub-band (adjustable)		5-30 MHz	0.2-35 MHz	5-75 MHz
Max. Gain	Uplink	75±3 dB	75±3 dB	75±3 dB
	Downlink	80±3 dB	80±3 dB	80±3 dB
Manual Gain Control		31 dB in step of 1 dB		
Automatic Gain Control		≥ 20 dB		
Gain Flatness (per sub-band)		≤ ±3.5 dB (peak-to-peak)		
Max. Input Power Without Damage		-10 dBm		
Output Power	Uplink	20±2 dBm	20±2 dBm	20±2 dBm
	Downlink	27±2 dBm	27±2 dBm	27±2 dBm
Out of Band Gain	2.5≤f_offset_CW< 5.0 MHz	≤60 dB		
	5.0≤f_offset_CW<10.0 MHz	≤45 dB		
	10.0 MHz≤f_offset_CW	≤35 dB		
Spurious Emission	9KHz-1GHz	≤ -36dBm		
	1GHz-12.75GHz	≤ -30dBm		
ACLR	4G: ±20MHz	≤ -40dBc		
	5G: ±100MHz	≤ -40dBc		
EVM		≤ 8%	≤ 8%	≤ 8%
Frequency Stability		≤ ±0.01 ppm		
Noise Figure		≤ 8 dB		
VSWR		≤ 2		
System Delay		≤ 8 μs		
RF Connector		N-Female		
Impedance		50 Ω		
Power Supply	Input	AC 100~240 V, 50/ 60 Hz		
	Output			
Power Consumption		≤ 85 W		
Dimensions		330*490*120 mm		
Weight		≤ 12kg		
IP Rating		IP40		
Operating Temperature		-10 °C to 50 °C		
NMS	Local	Via RJ45		
	Remote	Via Cloud-based NMS (optional)		

Technical specifications are subject to change without prior notice.



Quad Band-adjustable Digital Micro Repeater

Model: 42714D (P/N: 42714D.13820)

Product Features

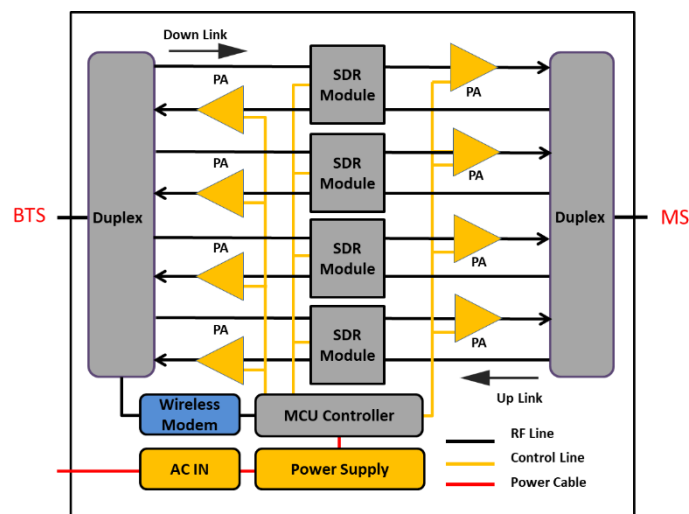
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- Independent gain control further optimizes performance.
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Application Scenario



Block Diagram



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Technical Specifications

P/N: 42714D.13820		B20 (800)	B8 (900)	B3 (1800)	B1 (2100)
Frequency Range (adjustable)	Uplink	832-862 MHz	880-915 MHz	1710-1785 MHz	1920-1980 MHz
	Downlink	791-821 MHz	925-960 MHz	1805-1880 MHz	2110-2170 MHz
Number of Sub-bands		1-3	1-3	1-3	1-3
Bandwidth per Sub-band (adjustable)		5-30 MHz	0.2-35 MHz	5-75 MHz	5-60 MHz
Max. Gain	Uplink	75±3 dB	75±3 dB	75±3 dB	75±3 dB
	Downlink	80±3 dB	80±3 dB	80±3 dB	80±3 dB
Manual Gain Control		31 dB in step of 1 dB			
Automatic Gain Control		≥ 20 dB			
Gain Flatness (per sub-band)		≤ ±3.5 dB (peak-to-peak)			
Max. Input Power Without Damage		-10 dBm			
Output Power	Uplink	20±2 dBm	20±2 dBm	20±2 dBm	20±2 dBm
	Downlink	27±2 dBm	27±2 dBm	27±2 dBm	27±2 dBm
Out of Band Gain	2.5≤f_offset_CW<5.0 MHz	≤60 dB			
	5.0≤f_offset_CW<10.0 MHz	≤45 dB			
	10.0 MHz≤f_offset_CW	≤35 dB			
Spurious Emission	9KHz-1GHz	≤ -36dBm			
	1GHz-12.75GHz	≤ -30dBm			
ACLR	4G: ±20MHz	≤-40dBc			
	5G: ±100MHz	≤-40dBc			
EVM		≤ 8%	≤ 8%	≤ 8%	≤ 8%
Frequency Stability		≤±0.01 ppm			
Noise Figure		≤ 8 dB			
VSWR		≤ 2			
System Delay		≤ 8 μs			
RF Connector		N-Female			
Impedance		50 Ω			
Power Supply	Input	AC 100~240 V, 50/ 60 Hz			
	Output				
Power Consumption		≤ 85 W			
Dimensions		330*490*120 mm			
Weight		≤ 12kg			
IP Rating		IP40			
Operating Temperature		-10 °C to 50 °C			
NMS	Local	Via RJ45			
	Remote	Via Cloud-based NMS (optional)			

Technical specifications are subject to change without prior notice.



Dual Band-adjustable Digital Repeater

Model: 43712D (P/N: 43712D.38)

Product Features

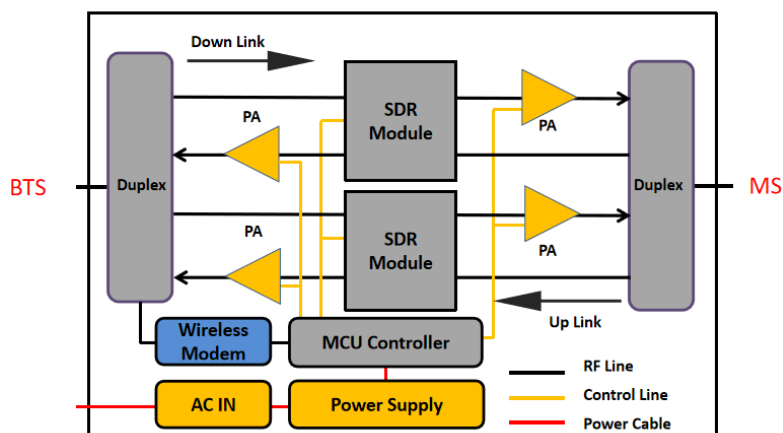
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Application Scenario



Block Diagram



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Technical Specifications

P/N: 43712D.38		B8 (900)	B3 (1800)
Frequency Range (adjustable)	Uplink	880-915 MHz	1710-1785 MHz
	Downlink	925-960 MHz	1805-1880 MHz
Number of Sub-bands		1-3	1-3
Bandwidth per Sub-band (adjustable)		0.2-35 MHz	5-75 MHz
Max. Gain	Uplink	85±3 dB	85±3 dB
	Downlink	90±3 dB	90±3 dB
Manual Gain Control		31 dB in step of 1 dB	
Automatic Gain Control		≥ 20 dB	
Gain Flatness (per sub-band)		≤ ±3.5 dB (peak-to-peak)	
Max. Input Power Without Damage		-10 dBm	
Output Power	Uplink	27±2 dBm	27±2 dBm
	Downlink	37±2 dBm	37±2 dBm
Out of Band Gain	2.5≤f_offset_CW<5.0 MHz	≤60 dB	
	5.0≤f_offset_CW<10.0 MHz	≤45 dB	
	10.0 MHz≤f_offset_CW	≤35 dB	
Spurious Emission	9KHz-1GHz	≤ -36dBm	
	1GHz-12.75GHz	≤ -30dBm	
ACLR	4G: ±20MHz	≤-40dBc	
	5G: ±100MHz	≤-40dBc	
EVM		≤ 8%	≤ 8%
Frequency Stability		≤ ±0.01 ppm	
Noise Figure		≤ 6 dB	
VSWR		≤ 1.5	
System Delay		≤ 8 μs	
RF Connector		N-Female	
Impedance		50 Ω	
Power Supply	Input	AC 100~240 V, 50/ 60 Hz	
	Output	-	
Power Consumption		≤ 450 W	
Dimensions		400*690*220mm	
Weight		≤ 38 kg	
IP Rating		IP65	
Operating Temperature		-10 °C to 50 °C	
NMS	Local	Via RJ45	
	Remote	Via Cloud-based NMS (optional)	

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Triple Band-adjustable Digital Repeater

Model: 43713D (P/N: 43714D.138)

Product Features

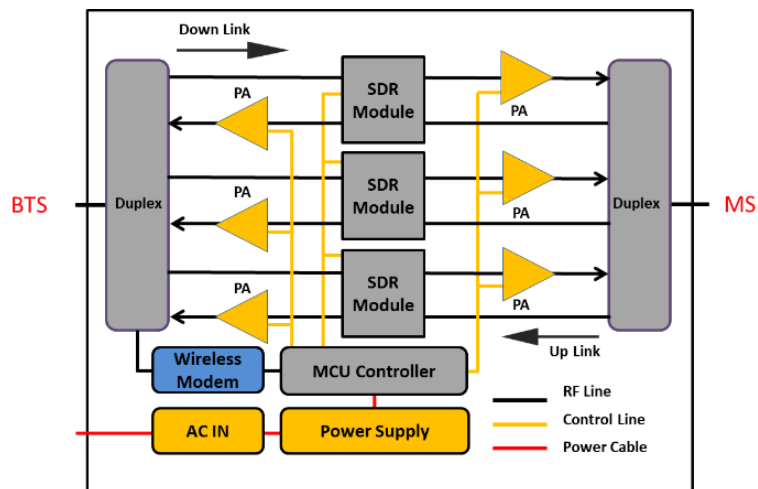
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Application Scenario



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Technical Specifications

P/N: 43714D.138		B8 (900)	B3 (1800)	B1 (2100)
Frequency Range (adjustable)	Uplink	880-915 MHz	1710-1785 MHz	1920-1980 MHz
	Downlink	925-960 MHz	1805-1880 MHz	2110-2170 MHz
Number of Sub-bands		1-3	1-3	1-3
Bandwidth per Sub-band (adjustable)		0.2-35 MHz	5-75 MHz	5-60 MHz
Max. Gain	Uplink	85±3 dB	85±3 dB	85±3 dB
	Downlink	90±3 dB	90±3 dB	90±3 dB
Manual Gain Control		31 dB in step of 1 dB		
Automatic Gain Control		≥ 20 dB		
Gain Flatness (per sub-band)		≤ ±3.5 dB (peak-to-peak)		
Max. Input Power Without Damage		-10 dBm		
Output Power	Uplink	27±2 dBm	27±2 dBm	27±2 dBm
	Downlink	37±2 dBm	37±2 dBm	37±2 dBm
Out of Band Gain	2.5≤f_offset_CW<5.0 MHz	≤60 dB		
	5.0≤f_offset_CW<10.0 MHz	≤45 dB		
	10.0 MHz≤f_offset_CW	≤35 dB		
Spurious Emission	9KHz-1GHz	≤ -36dBm		
	1GHz-12.75GHz	≤ -30dBm		
ACLR	4G: ±20MHz	≤-40dBc		
	5G: ±100MHz	≤-40dBc		
EVM		≤ 8%	≤ 8%	≤ 8%
Frequency Stability		≤ ±0.01 ppm		
Noise Figure		≤ 6 dB		
VSWR		≤ 1.5		
System Delay		≤ 8 μs		
RF Connector		N-Female		
Impedance		50 Ω		
Power Supply	Input	AC 100~240 V, 50/ 60 Hz		
	Output	-		
Power Consumption		≤ 450 W		
Dimensions		400*690*220mm		
Weight		≤ 38 kg		
IP Rating		IP65		
Operating Temperature		-10 °C to 50 °C		
NMS	Local	Via RJ45		
	Remote	Via Cloud-based NMS (optional)		

Technical specifications are subject to change without prior notice.



Quad Band-adjustable Digital Repeater

Model: 43714D (P/N: 43714D.13820)

Product Features

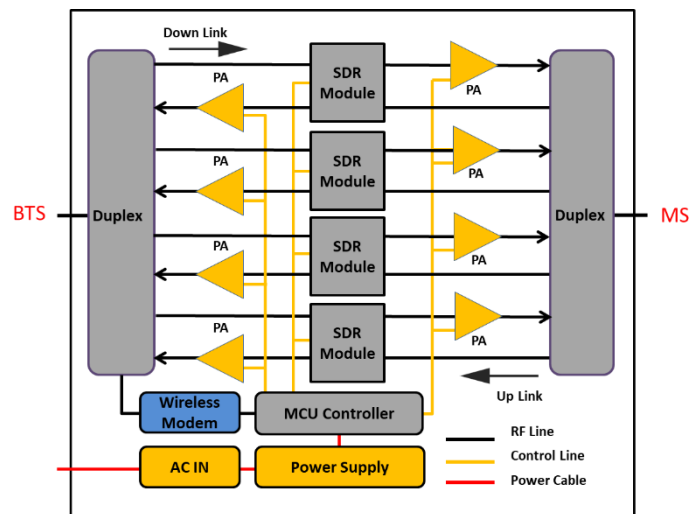
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Application Scenario



Block Diagram



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Technical Specifications

P/N: 43714D.13820		B20 (800)	B8 (900)	B3 (1800)	B1 (2100)
Frequency Range (adjustable)	Uplink	832-862 MHz	880-915 MHz	1710-1785 MHz	1920-1980 MHz
	Downlink	791-821 MHz	925-960 MHz	1805-1880 MHz	2110-2170 MHz
Number of Sub-bands		1-3	1-3	1-3	1-3
Bandwidth per Sub-band (adjustable)		5-30 MHz	0.2-35 MHz	5-75 MHz	5-60 MHz
Max. Gain	Uplink	85±3 dB	85±3 dB	85±3 dB	85±3 dB
	Downlink	90±3 dB	90±3 dB	90±3 dB	90±3 dB
Manual Gain Control		31 dB in step of 1 dB			
Automatic Gain Control		≥ 20 dB			
Gain Flatness (per sub-band)		≤ ±3.5 dB (peak-to-peak)			
Max. Input Power Without Damage		-10 dBm			
Output Power	Uplink	27±2 dBm	27±2 dBm	27±2 dBm	27±2 dBm
	Downlink	37±2 dBm	37±2 dBm	37±2 dBm	37±2 dBm
Out of Band Gain	2.5≤f_offset_CW<5.0 MHz	≤60 dB			
	5.0≤f_offset_CW<10.0 MHz	≤45 dB			
	10.0 MHz≤f_offset_CW	≤35 dB			
Spurious Emission	9KHz-1GHz	≤ -36dBm			
	1GHz-12.75GHz	≤ -30dBm			
ACLR	4G: ±20MHz	≤-40dBc			
	5G: ±100MHz	≤-40dBc			
EVM		≤ 8%	≤ 8%	≤ 8%	≤ 8%
Frequency Stability		≤±0.01 ppm			
Noise Figure		≤ 6 dB			
VSWR		≤ 1.5			
System Delay		≤ 8 μs			
RF Connector		N-Female			
Impedance		50 Ω			
Power Supply	Input	AC 100~240 V, 50/ 60 Hz			
	Output	-			
Power Consumption		≤ 450 W			
Dimensions		400*690*220mm			
Weight		≤ 38 kg			
IP Rating		IP65			
Operating Temperature		-10 °C to 50 °C			
NMS	Local	Via RJ45			
	Remote	Via Cloud-based NMS (optional)			

Technical specifications are subject to change without prior notice.



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