



MI-20804

Same Band Combiner

Type 3 & 4

MASS™

Microdata Advanced Site Solutions

With our expertise in site system design we are able to provide a solution for any site sharing or upgrade scenario.

Our focus area is RF-filter based solutions including combiners, multi band TMAs, di-, tri- and quadruplexers.

Our product portfolio supports all frequencies for mobile communication bands ranging from 450 MHz to 6 GHz.

Site and network sharing makes it cost efficient to reach sparsely populated areas where new subscribers can contribute to revenue.

MASS™

Advantage

Increases coverage
more traffic & higher ARPU

Increases capacity
more traffic & higher ARPU

Reduces the cost
of network expansion

Minimizes
site acquisition issues

Specifications

UMTS2100 Same Band Combiner, No AISG and DC Transparency			
Uplink (Rx)			
	Low	Mid	High
Frequency Band MHz	1920 - 1935	1940 - 1960	1970 - 1980
IL dB (typ/max.)	1.0/1.5	1.0/1.5	1.0/1.0
EVM typical %	0.1/0.5/2.0	2.0/0.5/0.1/0.8	0.98/0.97
	MHz @1922.5/1927.5/1932.5	@1942.5/1947.5/1952.5/1957.5	@1972.5/1977.0
Downlink (Tx)			
	Low	Mid	High
Frequency Band MHz	2110- 2125	2130 - 2150	2160 - 2170
IL dB (typ/max.)	0.5/0.7	0.6/0.7	0.6/0.1
Intermodulation, 2x43 dBm TX Carrier BTS port -160 dBc			
EVM typical %	0.1/0.4/1.5	1.6/0.4/0.2/1.0	0.55/0.09
	@2112.5/2117.5/2122.5	@2132.5/2137.5/2142.5	@2162.5/2167.5
Power Handling, Average 200W (53 dBm), Peak 500 W (57 dBm)			
All Bands			
Return Loss		18 dB	
Isolation between Node B ports		@ Rx frequency	@ Tx frequency
		20 dB	25 dB
Environmental			
Operating Temperature Range °C		-20 to +65°C	
Operation		ETS 300 019-1-4	
Storage		ETS 300 019-1-1	
Ingress Protection		IP67	
Miscellaneous			
EMC		EN 301 489-8	
Safety standards		EN 60950	
MTBF		1.5 M hours	
Lightning Protection		3 kA 10/350 µs, 10 kA 8/20 µs	
Mechanical			
Dimensions (WxHxD)		350x250x80 mm	
Connectors		7/16 (F)	
Volume		5.8 l	
Weight		9 kg	
Colour		NCS 1502-R	

Block Diagram

