



MI-20805

Same Band Combiner

Type 5

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, AISG and DC Transparency			
Uplink (Rx)			
	Low	High	
Frequency Band MHz	No pass	1920 - 1980	
IL dB (typ/max.)		0.15/0.2 +25C	
EVM typical %			
Downlink (Tx)			
	Low	High	
Nominal Frequency Band	2135 - 2140 MHz	2145 - 2150 MHz	
Occupied BW	2135.4 - 2139.6 MHz	2145.4 - 2149.6 MHz	
IL dB (typ/max.) OBW	0.6/0.7 +25C	0.6/0.7 +25C	
Intermodulation, 2x43 dBm TX Carrier BTS port -160 dBc			
EVM typical %	1.5	1.5	
	MHz @2137.5	MHz @2147.5	
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
		30 dB	25 dB
Power Supply			
AISG Signal Attenuation		< 1 dB @ 2.176 MHz	
Voltage Drop		1 V max. @ 10 - 30 VDC	
Supply Voltage Handling		0 - 32VDC	
Continuous Current Handling		5A, 0 - 32 VDC	
AISG / DC Transparency between ports		High to Common	
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)		254x145x52 mm ex connectors	
Connectors		7/16 (F)	
Volume		1.9 l	
Weight		4 kg	
Colour		NCS 1502-R	

Block Diagram

