

MA1200 tests general information

Product name: MA2000

**Applicant: MobileAccess Networks Ltd.
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Northern Industrial Zone
Lod, Israel 71293**

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FCC ID: OJFMA2000

Tested by:

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Dates of testing: 23/3/2004~25/3/2004, 16/5/2004~18/5/2004, 27/5/2004

Type of emissions:

DXW (TDMA), F9W (CDMA), F8W (AMPS), F1D (Paging), GXW (iDEN),
F3E (LMR), F3E (SMR), GXW (GSM),

Frequency range:

<u>SERVICES</u>	<u>DOWNLINK</u>	<u>UPLINK</u>
AMPS/TDMA/CDMA 800	869~894MHz	824~849MHz
LMR/iDEN 800	851~869MHz	806~824MHz
Paging 900	928~941MHz	899~902MHz
TDMA/CDMA/GSM 1900	1930~1990MHz	1850-1910 MHz

Range of Operation Power

Input power range (with RIU): 10~36dBm. Refer to the data sheet

For output power refer to the next table

Maximum Power Rating

Service / Modulation	Downlink Band [MHz]	Output Powers Specification (dBm) mean	Hermon Lab. Max. Power (dBm)	Hermon Lab. Max. Power (W)
(F8W) AMPS 800	869-894	14	16.8	.048
(DXW) TDMA 800	869-894	14	16.7	.047
(F9W) CDMA 800	869-894	14	17.1	.051
(F3E) LMR 800	851-869	14	17.7	.059
(GXW) iDEN 800	851-869	14	17.3	.054
(F3E) SMR 900	935-941	14	19.1	.081
(F1D) Paging 900	928-941	14	19.1	.081
(DXW) TDMA 1900	1930-1990	14	16.4	.044
(GXW) GSM 1900	1930-1990	14	17.3	.054
(F9W) CDMA 1900	1930-1990	14	16.5	.045

TEST EQUIPMENTS LIST

From MobileAccess:

MA Serial No.	Description	Manufacturer information			Due Calibr.
		Name	Model No.	Serial No.	
20	Digital Signal Generator 250KHz – 3000MHz	HP	ESG-E4432B	US393406 72	02/2005
21	Digital Signal Generator 250KHz – 3000MHz	HP	ESG-E4000A	GB37040 173	02/2005
26	Digital Signal Generator 250KHz – 3000MHz	HP	ESG-D3000A	US370408 81	02/2005
29	Digital Signal Generator 250KHz – 3000MHz	HP	ESG-E4432B	GB38450 502	02/2005

From Hermon Laboratories:

HLNo	Equipment Description	Manufacturer	Model	Ser. No.	Last Cal.
26	Analyzer, Spectrum, 100 Hz - 2.2 GHz	Anritsu	MS-2601A	3460	22-Sep-03
121	Filter Low Pass, 0 - 1200 MHz	Hewlett Packard	360B	121	06-Jan-03
163	LISN FCC/VDE/MIL-STD	Electro-Metrics	ANS 25/2	1314	01-Oct-03
447	LISN, 16/2, 300V RMS	HL	LISN 16 - 1	066	03-Nov-03
493	Oven temperature -45...175 deg C	Thermotron	S-1.2 Mini-Max	14016	23-Sep-03
521	EMI Receiver (Spectrum Analyzer) with RF filter section 9 k-6.5 GHz	Hewlett Packard	8546A	3617A 00319, 3448A00253	26-Sep-03
580	DC block adaptor 10 kHz - 2.2 GHz	Anritsu	MA8601 A	580	26-Dec-03
589	Cable Coaxial, GORE A2P01POL118, 2.3 m	HL	GORE-3	176	02-Dec-03
590	Attenuator 10 dB, 50 Ohm, N-type, 2 W	Elisra Electronic Systems	MW2100-N-Type	10	15-Jan-04
603	Mains Impedance Stabilization Network, 3 phase, 400 V, 40A	HL	MISN3-400-40	603	10-Feb-04
604	Antenna BiconiLog Log-Periodic/T Bow-TIE 26 - 2000 MHz	EMCO	3141	9611-1011	10-Jan-04
661	Generator Swept Signal, 10 MHz to 40 GHz, + 10 dBm	Hewlett Packard	83640B	3614A00266	14-Sep-03
787	Transient Limiter	Hewlett Packard	11947A	3107A01877	21-Nov-03
1097	Attenuator, 50 Ohm, 5 W, DC to 8 GHz, 20 dB	Midwest Microwave	0793-20-NN-07	1097	15-Jan-04
1424	Spectrum Analyzer, 30 Hz-40 GHz	Agilent Technologies (HP)	8564EC	3946A00219	30-Aug-03

HLNo	Equipment Description	Manufacturer	Model	Ser. No.	Last Cal.
1562	Oscilloscope 100 MHz, DMM	Tektronix	THS720A	B039444	20-Sep-03
1651	Attenuators Set (2, 3, 5, 20 dB), DC-18 GHz	M/A-COM	2082	1651	03-Jan-04

1947	Cable 18GHz, 6.5 m, blue	Rhophase Microwave Limited	NPS-1803A-6500-NPS	T4974	17-Oct-03
1984	Antenna, Double-Ridged Waveguide Horn, 1-18 GHz, 300 W, N-type	EMC Test Systems	3115	9911-5964	22-Mar-04
1989	Adapter, 18 - 26.5 GHz, WR- 42/SMA	Continental Microwave & Tool Co.	WR-42/SMA	1989	30-Aug-03
2014	Attenuator, Manual Step, 0-99/1 dB, 0-4 GHz, 2 W	Weinschel	AC9004-99-11	16924	08-Dec-03
2258	Amplifier Low Noise 2-20 GHz	Sophia Wireless	LNA0220-C	0222	05-Nov-03
2260	Amplifier Low Noise 14-33 GHz	Sophia Wireless	LNA28-B	0233	05-Nov-03
2387	Filter Bandpass, 8-14 GHz	HL	FBP8-14	2387	05-Jun-03
2399	Cable 40GHz, 1.5 m, blue	Rhophase Microwave Limited	KPS-1503A-1500-KPS	X2945	24-Jun-03
2400	Cable 40GHz, 1.5 m, green	Rhophase Microwave Limited	KPS-1503A-1500-KPS	X2946	24-Jun-03
2432	Antenna, Double-Ridged Waveguide Horn 1-18 GHz	EMC Test Systems	3115	000271777	02-Jul-03
2524	Attenuator, 10 dB, DC-18 GHz	Midwest Microwave	263-10	2524	01-Mar-04

Block diagram of test setup:

