

**DIGITAL EMC CO., LTD.**

683-3, Yubang-Dong, Yongin-Si, Kyunggi-Do, 449-080, Korea

Tel: +82-31-321-2664 Fax: +82-31-321-1664

<http://www.digitalemc.com>

RF Test Report

*FCC Rule Part(s):***FCC Part 15 Subpart C (§15. 225)**

- **Applicant** : D.O.Tel Co., Ltd.
#412, Kolon Science Valley II, 811 Guro-dong, Guro-gu,
Seoul, Korea 152-878
- **Manufacturer** : D.O.Tel Co., Ltd.
- **FCC Classification** : Low Power Communications Device Transmitter(DXX)
- **FCCID** : QD5-DOTH-100
- **Device name** : Handheld Printer Terminal
- **Model name** : DOTH-100
- **Tested date** : October 22 ~ 28, 2009
- **Data of issue** : October 30, 2009

Tested by: *Engineer*Reviewed by: *Manager*

Byung -Gee, HAN



Won-Jung, Lee

*This report contains the result of tests performed by **DIGITAL EMC CO., LTD.**
Quality control in **DIGITAL EMC., LTD.** is implemented as per ISO/IEC 17025*

The Test results relate only to the tested sample. It is not allowed to copy this report even partly without the allowance of DIGITAL EMC CO., LTD.

TABLE OF CONTENTS

1. Equipment information	3
2. Information about test items	4
3. Test Report	5
3.1 Summary of tests	5
3.2 Transmitter requirements	6
3.2.1 20dB Bandwidth Measurement	6
3.2.2 In-Band Radiated Spurious Emission	7
3.2.3 Radiated Spurious Emission Measurements, Out-of-Band	8
3.2.4 Frequency Stability	10
3.2.5 AC Line Conducted Emissions	11
APPENDIX	
APPENDIX TEST EQUIPMENT USED FOR TESTS	12

1. Equipment information

QD5-DOTH-100

1.1 Equipment details

Equipment type	Handheld Printer Terminal
Model name	DOTH-100
Serial number	Identical prototype
Frequency band	13.56MHz
Channel	1
Modulation type	ASK
Supplied tag	15693, Mifare
Power type	Battery (DC 7.4V)
Antenna type	Loop Antenna



2. Information about test items

QD5-DOTH-100

2.1 Tested environment

Temperature (°C)	:	15~35 (°C)
Relative humidity content	:	20 ~75 %
Air pressure	:	86 ~ 103 kPa
Details of power supply	:	DC 7.4 V

2.2 Tested frequency

Frequency	TX	RX
Lowest frequency	13.56MHz	13.56MHz
Middle frequency	-	-
Highest frequency	-	-

2.3 Tested system details

Type	Model No.	Serial No.	Manufacturer	Note
Tag	15693	N/A	N/A	N/A
Tag	Myfare	N/A	N/A	N/A

2.4 EMI Suppression Device(s)/Modifications

EMI suppression device(s) added and/or modifications made during testing
→ None

3. Test Report

3.1 Summary of tests

FCC Part Section(S)	Parameter	Test Limit	Test Condition	Status Note 1
Transmitter requirements				
2.1049	20 dB Bandwidth	N/A	Radiated	C
15.225 (a)	In-Band Emissions	15.848 $\mu\text{V}/\text{m}$ @ 30m 15.553 – 13.567 MHz		C
15.225 (b)	In-Band Emissions	334 $\mu\text{V}/\text{m}$ @ 30m 13.410 – 13.553 MHz 13.567 – 13.710 MHz		C
15.225 (c)	In-Band Emissions	106 $\mu\text{V}/\text{m}$ @ 30m 13.110 – 13.410 MHz 13.710 – 14.010 MHz		C
15.225 (d) 15.205 15.209	Out-of Band Emissions	Emissions outside of the specified band (13.110-14.010 MHz) must meet the radiated limits detailed in 15.209		C
15.225 (e)	Frequency Stability Tolerance	$\pm 0.001\%$ of operating frequency	Conducted	C
15.207	AC Conducted Emissions	EN 55022	AC Line Conducted	NA Note 2
<p>Note 1: C=Comply NC=Not Comply NT=Not Tested NA=Not Applicable</p> <p>Note 2: Normally when this device is in the charging mode, the RFID function is not used.</p> <p>Note 3: All test items were tested using 2 tags. And The worst case(Tag: 15693) data was reported.</p>				

The sample was tested according to the following specification:
FCC Part 15.225; ANSI C-63.4-2003

3.2 Transmitter requirements

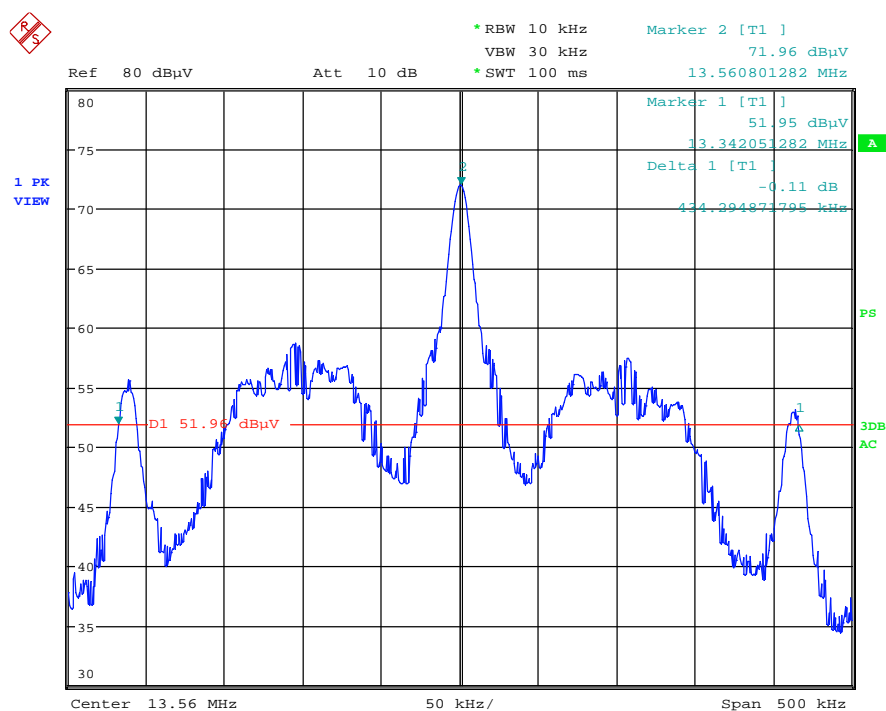
3.2.1 20dB Bandwidth Measurement (§2.1049)

- Procedure

The 20dB Bandwidth is measured with a spectrum analyzer connected via a receive antenna placed near the EUT while the EUT is operating in transmission mode.

- Measurement Data: **Comply**

Tested Frequency(MHz)	Test Results(KHz)
13.56	434.294



- Minimum Standard

None

3.2.2 In-Band Radiated Spurious Emission (§15.225(a), (b), (c))

- Procedure

The EUT was placed on a 0.8m high wooden table inside a shielded enclosure. An antenna was placed near the EUT and measurements of frequencies and amplitudes of field strengths were recorded for reference during final measurements. For final radiated testing, measurements were performed in OATS. Measurements were performed with the EUT oriented in 3 orthogonal axis and rotated 360 degrees to determine worst-case orientation for maximum emissions.

- Measurement Data: **Comply**

Frequency Band [MHz]	Frequency [MHz]	ANT Pol	Reading [dBuV]	T.F [dB/m]	Field Strength @ 3m [dBuV/m]	Field Strength @ 30m [dBuV/m]	Limit [dBuV/m]	Margin [dB]
13.110 ~ 13.410	13.347	V	55.56	-12.15	43.41	3.41	40.51	37.10
13.410 ~ 13.553	13.553	V	66.13	-12.17	53.96	13.96	50.47	36.51
13.553 ~ 13.567	13.560	V	71.95	-12.17	59.78	19.78	84.00	64.22
13.567 ~ 13.710	13.567	V	67.07	-12.17	54.90	14.90	50.47	35.57
13.710 ~ 14.010	13.772	V	53.16	-12.18	40.98	0.98	40.51	39.53

Note 1. This test item was performed using a loop antenna.

Note 2. This test item was performed at 3m and the data were extrapolated to the specified measurement distance of 30m using the square of an inverse linear distance extrapolation factor (40 dB/decade) as specified in §15.31(f)2.

▪ Extrapolation Factor = $20 \log_{10}(30/3)^2 = 40\text{dB}$

Note 3. All data were recorded using a spectrum analyzer employing a peak detector.

PK results were meet Quasi-peak limit. So Quasi-peak measurements were omitted.

Note 4. Sample Calculation.

Margin = Limit – Field Strength @ 30m / Field Strength @ 30m = Field Strength @ 3m – 40

Field Strength @ 3m = Reading + T.F / T.F = AF + CL – AG

Where, T.F = Total Factor, AF = Antenna Factor, CL = Cable Loss, AG = Amplifier Gain

- Minimum Standard

Frequency Band [MHz]	Limit	
	[uV/m]	[dBuV/m]
13.553-13.567	15,848	84.00
13.410-13.553 13.567-13.710	334	50.47
13.110-13.410 13.710-14.010	106	40.51

3.2.3 Radiated Spurious Emission Measurements, Out-of-Band (§15.225(d) / §15.205 and 209)

- Procedure

The EUT was tested from 9kHz up to the 1GHz excluding the band 13.110-14.010MHz. All measurements were recorded with spectrum analyzer employing a peak detector for emissions below 30MHz. Above 30MHz a Quasi-peak detector was used. All out-of-band emissions must not exceed the limits §15.209. A loop antenna was used for searching for emissions below 30MHz.

- **Measurement Data:** **Comply** (refer to the next page)

- Minimum Standard

- **FCC Part 15.205 (a):** Only spurious emissions are permitted in any of the frequency bands listed below:

MHz	MHz	MHz	MHz	GHz	GHz
0.009 ~ 0.110	8.41425 ~ 8.41475	108 ~ 121.94	1300 ~ 1427	3.6 ~ 4.4	14.47 ~ 14.5
0.495 ~ 0.505	12.29 ~ 12.293	123 ~ 138	1435 ~ 1626.5	4.5 ~ 5.15	15.35 ~ 16.2
2.1735 ~ 2.1905	12.51975 ~ 12.52025	149.9 ~ 150.05	1645.5 ~ 1646.5	5.35 ~ 5.46	17.7 ~ 21.4
4.125 ~ 4.128	12.57675 ~ 12.57725	156.52475 ~ 156.52525	1660 ~ 1710	7.25 ~ 7.75	22.01 ~ 23.12
4.17725 ~ 4.17775	13.36 ~ 13.41	156.7 ~ 156.9	1718.8 ~ 1722.2	8.025 ~ 8.5	23.6 ~ 24.0
4.20725 ~ 4.20775	16.42 ~ 16.423	162.0125 ~ 167.17	2200 ~ 2300	9.0 ~ 9.2	31.2 ~ 31.8
6.215 ~ 6.218	16.69475 ~ 16.69525	167.72 ~ 173.2	2310 ~ 2390	9.3 ~ 9.5	36.43 ~ 36.5
6.26775 ~ 6.26825	16.80425 ~ 16.80475	240 ~ 285	2483.5 ~ 2500	10.6 ~ 12.7	Above 38.6
6.31175 ~ 6.31225	25.5 ~ 25.67	322 ~ 335.4	2655 ~ 2900	13.25 ~ 13.4	
8.291 ~ 8.294	37.5 ~ 38.25	399.90 ~ 410	3260 ~ 3267		
8.362 ~ 8.366	73 ~ 74.6	608 ~ 614	3332 ~ 3339		
8.37625 ~ 8.38675	74.8 ~ 75.2	960 ~ 1240	3345.8 ~ 3358		

- **FCC Part 15.205(b):**

The field strength of emissions appearing within these frequency bands shall not exceed the limits shown in §15.209. At frequencies equal to or less than 1000 MHz, compliance with the limits in §15.209 shall be demonstrated using measurement instrumentation employing a CISPR quasi-peak detector. Above 1000 MHz, compliance with the emission limits in §15.209 shall be demonstrated based on the average value of the measured emissions. The provisions in §15.35 apply to these measurements.

- **FCC Part 15.209(a):**

Frequency [MHz]	Field Strength [uV/m]	Measurement Distance [Meters]
0.009 ~ 0.490	2400/F(kHz)	300
0.490 ~ 1.705	24000/F(kHz)	30
1.705 ~ 30	30	30
30 ~ 88	100 **	3
88 ~ 216	150 **	3
216 ~ 960	200 **	3
Above 960	200	3

** Except as provided in 15.209(g), fundamental emissions from intentional radiators operating under this Section shall not be located in the frequency bands 54-72 MHz, 76-88MHz, 174-216MHz or 470-806MHz. However, operation within these frequency bands is permitted under other sections of this Part, e.g. 15.231 and 15.241.

- **FCC Part 15.209(b):**

In the emission table above, the tighter limit applies at the band edges.

- Measurement Data:

Tested Frequency : 13.56MHz
Measurement Distance : 3 Meters

Frequency [MHz]	ANT Pol	Reading [dBuV]	T.F [dB/m]	Distance factor	Field Strength [dBuV/m]	Limit [dBuV/m]	Margin [dB]
31.554	V	31.30	-4.40	N/A	26.90	40.00	13.10
77.990	V	36.40	-14.00	N/A	22.40	40.00	17.60
90.990	V	37.80	-12.00	N/A	25.80	43.50	17.70
103.990	V	38.30	-10.20	N/A	28.10	43.50	15.40
135.600	V	36.30	-9.60	N/A	26.70	43.50	16.80
162.132	V	38.90	-10.30	N/A	28.60	43.50	14.90
176.122	V	39.10	-10.50	N/A	28.60	43.50	14.90
176.280	H	38.50	-10.50	N/A	28.00	43.50	15.50
188.840	H	39.40	-10.20	N/A	29.20	43.50	14.30
203.400	V	43.70	-9.80	N/A	33.90	43.50	9.60
203.410	H	46.80	-9.80	N/A	37.00	43.50	6.50
230.520	H	47.40	-8.50	N/A	38.90	46.00	7.10
230.520	V	42.20	-8.50	N/A	33.70	46.00	12.30
257.640	V	41.80	-7.50	N/A	34.30	46.00	11.70
257.650	H	50.00	-7.50	N/A	42.50	46.00	3.50
271.210	H	45.50	-7.20	N/A	38.30	46.00	7.70
284.770	H	46.10	-6.90	N/A	39.20	46.00	6.80
311.890	H	42.50	-6.30	N/A	36.20	46.00	9.80
393.250	H	38.20	-4.50	N/A	33.70	46.00	12.30
461.050	H	35.20	-3.50	N/A	31.70	46.00	14.30
501.720	V	31.00	-2.80	N/A	28.20	46.00	17.80

Note 1. All measurements were recorded using a spectrum analyzer employing a peak detector for below 30MHz and a Quasi-peak detector for above 30MHz.

Note 2. Both Vertical and Horizontal polarities of the receiver antenna were evaluated with the worst case emissions being reported.

Note 3. The worst-case emissions are reported.

Note 4. No other spurious and harmonic were detected at level greater than 20dB below limit.

Note 5. Sample calculation

Margin = Limit – Field Strength / T.F = AF + CL – AG

Distance factor = 20log(Measurement distance / The measured distance)

Where, T.F = Total Factor, AF = Antenna Factor, CL = Cable Loss, AG = Amplifier Gain

3.2.4 Frequency Stability (§15.225(e))

- Procedure

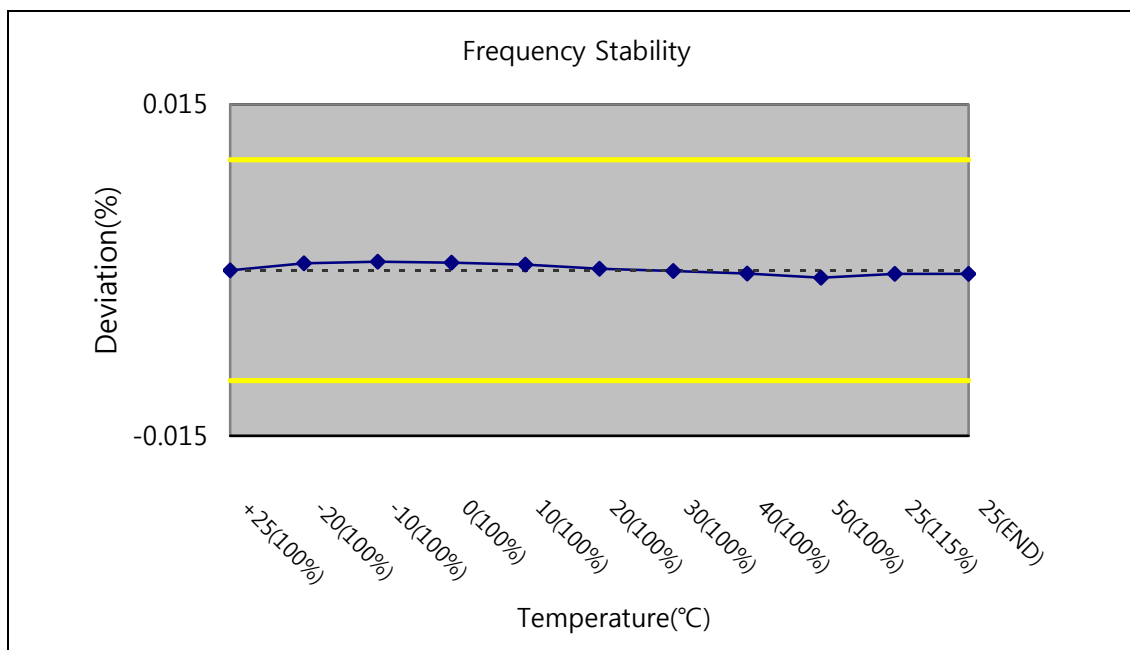
Part 15.225 requires that devices operating in the 13.553 – 13.567 MHz shall maintain the carrier frequency within 0.01% of the operating frequency over the temperature variation of -20 degrees to + 50 degrees C at normal supply voltage.

- Measurement Data: **Comply**

Operating Frequency : 13560000 Hz
Reference Voltage : 7.4 V DC

VOLTAGE (%)	POWER (VDC)	TEMP (°C)	Frequency (Hz)	Freq. Dev. (Hz)	Deviation (%)
100%	7.4	+25(ref)	13,560,540	540	0.000000
100%		-20	13,560,624	624	0.000619
100%		-10	13,560,644	644	0.000767
100%		0	13,560,631	631	0.000671
100%		+10	13,560,607	607	0.000494
100%		+20	13,560,558	558	0.000133
100%		+30	13,560,532	532	-0.000059
100%		+40	13,560,499	499	-0.000302
100%		+50	13,560,447	447	-0.000686
85%	6.290	+25	-	-	-
115%	8.510	+25	13,560,495	495	-0.000332
BATT.ENDPOINT	7.000	+25	13,560,493	493	-0.000347

Note 1: This device is not operated at 6.29V(85%)



- Minimum Standard

The frequency tolerance of the carrier signal shall be maintained within $\pm 0.01\%$ of the operating frequency.

3.2.5 AC Line Conducted Emissions (§15.207/EN 55022)

- Procedure

The conducted emissions are measured in the shielded room with a spectrum analyzer in peak hold. While the measurement, EUT had its hopping function disabled at the middle channels in line with Section 15.21(m). Emissions closest to the limit are measured in the quasi-peak and average detector mode with the tuned receiver using a bandwidth of 9 kHz. The emissions are maximized further by cable manipulation and Exerciser operation. The highest emissions relative to the limit are listed.

- Measurement Data: **NA**

Note: Normally when this device is in the charging mode, the RFID function is not used.

- Minimum Standard: FCC Part 15.207(a)/EN 55022

Frequency Range (MHz)	Conducted Limit (dBuV)	
	Quasi-Peak	Average
0.15 ~ 0.5	66 to 56 *	56 to 46 *
0.5 ~ 5	56	46
5 ~ 30	60	50

* Decreases with the logarithm of the frequency

APPENDIX

TEST EQUIPMENT FOR TESTS

To facilitate inclusion on each page of the test equipment used for related tests, each item of test equipment.

	Type	Manufacturer	Model	Cal.Due.Date (dd/mm/yy)	Next.Due.Date (dd/mm/yy)	S/N
<input checked="" type="checkbox"/>	Spectrum Analyzer	Agilent	E4440A	25/09/09	25/09/10	MY45304199
<input type="checkbox"/>	Spectrum Analyzer	Rohde Schwarz	FSQ26	05/06/09	05/06/10	200445
<input type="checkbox"/>	Spectrum Analyzer(RE)	H.P	8563E	13/10/09	13/10/10	3551A04634
<input type="checkbox"/>	Power Meter	H.P	EMP-442A	02/07/09	02/07/10	GB37170413
<input type="checkbox"/>	Power Sensor	H.P	8481A	02/07/09	02/07/10	3318A96332
<input type="checkbox"/>	Power Divider	Agilent	11636B	13/10/09	13/10/10	56471
<input type="checkbox"/>	Power Splitter	Anritsu	K241B	13/10/09	13/10/10	20611
<input type="checkbox"/>	Power Splitter	Anritsu	K241B	02/07/09	02/07/10	017060
<input type="checkbox"/>	Frequency Counter	H.P	5342A	13/07/09	13/07/10	2119A04450
<input checked="" type="checkbox"/>	TEMP & HUMIDITY Chamber	JISCO	KR-100/J-RHC2	10/10/09	10/10/10	30604493/021031
<input checked="" type="checkbox"/>	Digital Multimeter	H.P	34401A	13/03/09	13/03/10	3146A13475, US36122178
<input type="checkbox"/>	Multifuction Synthesizer	HP	8904A	06/10/09	06/10/10	3633A08404
<input type="checkbox"/>	Signal Generator	Rohde Schwarz	SMR20	13/03/09	13/03/10	101251
<input type="checkbox"/>	Signal Generator	H.P	ESG-3000A	02/07/09	02/07/10	US37230529
<input type="checkbox"/>	Vector Signal Generator	Rohde Schwarz	SMJ100A	02/02/09	02/02/10	100148
<input type="checkbox"/>	Audio Analyzer	H.P	8903B	02/07/09	02/07/10	3011A09448
<input type="checkbox"/>	Modulation Analyzer	H.P	8901B	02/07/09	02/07/10	3028A03029
<input type="checkbox"/>	8960 Series 10 Wireless Comms. Test Set	Agilent	E5515C	02/07/09	02/07/10	GB43461134
<input type="checkbox"/>	Universal Radio communication Tester	Rohde Schwarz	CMU 200	19/05/09	19/05/10	106760
<input type="checkbox"/>	Bluetooth Tester	TESCOM	TC-3000B	02/07/09	02/07/10	3000B000268
<input type="checkbox"/>	Thermo hygrometer	BODYCOM	BJ5478	06/02/09	06/02/10	090205-3
<input checked="" type="checkbox"/>	Thermo hygrometer	BODYCOM	BJ5478	06/02/09	06/02/10	090205-2
<input type="checkbox"/>	Thermo hygrometer	BODYCOM	BJ5478	06/02/09	06/02/10	090205-4
<input type="checkbox"/>	AC Power supply	DAEKWANG	5KVA	13/03/09	13/03/10	20060321-1
<input checked="" type="checkbox"/>	DC Power Supply	HP	6622A	13/03/09	13/03/10	3448A03760
<input type="checkbox"/>	DC Power Supply	HP	6633A	13/03/09	13/03/10	3524A06634
<input type="checkbox"/>	BAND Reject Filter	Microwave Circuits	N0308372	06/10/09	06/10/10	3125-01DC0352
<input type="checkbox"/>	BAND Reject Filter	Wainwright	WRCG1750	06/10/09	06/10/10	2
<input type="checkbox"/>	High-Pass Filter	ANRITSU	MP526D	06/10/09	06/10/10	M27756
<input type="checkbox"/>	High-pass filter	Wainwright	WHKX2.1	N/A	N/A	1
<input type="checkbox"/>	High-Pass Filter	Wainwright	WHKX3.0	N/A	N/A	9
<input type="checkbox"/>	Tunable Notch Filter	Wainwright	WRCT800.0 /960.0-0.2/40-8SSK	N/A	N/A	10
<input type="checkbox"/>	Tunable Notch Filter	Wainwright	WRCD1700.0 /2000.0-0.2/40-10SSK	N/A	N/A	27
<input type="checkbox"/>	Tunable Notch Filter	Wainwright	WRCT1900.0/ 2200.0-5/40-10SSK	N/A	N/A	7
<input type="checkbox"/>	HORN ANT	ETS	3115	17/06/09	17/06/10	6419
<input type="checkbox"/>	HORN ANT	ETS	3115	23/09/09	23/09/10	21097
<input type="checkbox"/>	HORN ANT	A.H.Systems	SAS-574	10/06/09	10/06/10	154
<input type="checkbox"/>	HORN ANT	A.H.Systems	SAS-574	10/06/09	10/06/10	155

	Type	Manufacturer	Model	Cal.Due.Date (dd/mm/yy)	Next.Due.Date (dd/mm/yy)	S/N
<input type="checkbox"/>	Dipole Antenna	Schwarzbeck	VHA9103	06/10/09	06/10/10	2116
<input type="checkbox"/>	Dipole Antenna	Schwarzbeck	VHA9103	06/10/09	06/10/10	2117
<input type="checkbox"/>	Dipole Antenna	Schwarzbeck	UHA9105	05/10/09	05/10/10	2261
<input type="checkbox"/>	Dipole Antenna	Schwarzbeck	UHA9105	05/10/09	05/10/10	2262
<input checked="" type="checkbox"/>	LOOP Antenna	ETS	6502	14/09/09	14/09/10	3471
<input type="checkbox"/>	Coaxial Fixed Attenuators	Agilent	8491B	02/07/09	02/07/10	MY39260700
<input type="checkbox"/>	Coaxial Fixed Attenuators	Agilent	8491B	02/07/09	02/07/10	MY39260699
<input type="checkbox"/>	Attenuator (10dB)	WEINSCHTEL	23-10-34	01/10/09	01/10/10	BP4386
<input type="checkbox"/>	Attenuator (10dB)	WEINSCHTEL	23-10-34	19/01/09	19/01/10	BP4387
<input type="checkbox"/>	Attenuator (20dB)	WEINSCHTEL	86-20-11	06/10/09	06/10/10	432
<input type="checkbox"/>	Attenuator (10dB)	WEINSCHTEL	31696	06/10/09	06/10/10	446
<input type="checkbox"/>	Attenuator (10dB)	WEINSCHTEL	31696	06/10/09	06/10/10	408
<input type="checkbox"/>	Attenuator (40dB)	WEINSCHTEL	57-40-33	01/10/09	01/10/10	NN837
<input type="checkbox"/>	Attenuator (30dB)	JFW	50FH-030-300	13/03/09	13/03/10	060320-1
<input type="checkbox"/>	Type N Coaxial CIRCULATOR	NOVA MICROWAVE	0088CAN	02/07/09	02/07/10	788
<input type="checkbox"/>	Type N Coaxial CIRCULATOR	NOVA MICROWAVE	0185CAN	02/07/09	02/07/10	790
<input type="checkbox"/>	Type N Coaxial CIRCULATOR	NOVA MICROWAVE	0215CAN	02/07/09	02/07/10	112
<input type="checkbox"/>	Amplifier (30dB)	Agilent	8449B	10/10/09	10/10/10	3008A01590
<input type="checkbox"/>	Amplifier	EMPOWER	BBS3Q7ELU	02/02/09	02/02/10	1020
<input type="checkbox"/>	RF Power Amplifier	OPHIRRF	5069F	02/07/09	02/07/10	1006
<input checked="" type="checkbox"/>	EMI TEST RECEIVER	R&S	ESU	02/02/09	02/02/10	100014
<input checked="" type="checkbox"/>	BILOG ANTENNA	SCHAFFNER	CBL6112B	02/06/09	02/06/10	2737
<input checked="" type="checkbox"/>	Amplifier (22dB)	H.P	8447E	05/02/09	05/02/10	2945A02865
<input type="checkbox"/>	EMI TEST RECEIVER	R&S	ESCI	12/05/09	12/05/10	100364
<input type="checkbox"/>	LOG-PERIODIC ANT.	Schwarzbeck	UHALP9108A	30/05/09	30/05/10	590
<input type="checkbox"/>	BICONICAL ANT.	Schwarzbeck	VHA 9103	02/06/09	02/06/10	2233
<input type="checkbox"/>	LOG-PERIODIC ANT.	Schwarzbeck	UHALP9108A1	07/10/09	07/10/10	1098
<input type="checkbox"/>	BICONICAL ANT.	Schwarzbeck	VHA 9103	06/10/09	06/10/10	91031946
<input type="checkbox"/>	Low Noise Pre Amplifier	TSJ	MLA-100K01-B01-2	13/03/09	13/03/10	1252741
<input type="checkbox"/>	Amplifier (25dB)	Agilent	8447D	12/05/09	12/05/10	2944A10144
<input type="checkbox"/>	Amplifier (25dB)	Agilent	8447D	03/07/09	03/07/10	2648A04922
<input type="checkbox"/>	Spectrum Analyzer(CE)	H.P	8591E	26/04/09	26/04/10	3649A05889
<input type="checkbox"/>	LISN	Kyoritsu	KNW-407	03/07/09	03/07/10	8-317-8
<input type="checkbox"/>	LISN	Kyoritsu	KNW-242	13/10/09	13/10/10	8-654-15
<input type="checkbox"/>	CVCF	NF Electronic	4420	13/03/09	13/03/10	304935/337980
<input type="checkbox"/>	DC BLOCK	Hyuplip	KEL-007	N/A	N/A	7-1581-5
<input type="checkbox"/>	50 ohm Terminator	HME	CT-01	22/01/09	22/01/10	N/A
<input type="checkbox"/>	RFI/FIELD Intensity Meter	Kyoritsu	KNM-2402	03/07/09	03/07/10	4N-170-3