

# AEC-VPMS-200

## P5 Electronic Test Report

Report NO: 08P010004

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Test Engineer / Date

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## Table of Contents

1. Project.....	3
2. Team Member.....	3
3. Test Equipments .....	3
4. Electronic Test Condition &Spec .....	3
5. Photos of Product .....	4
Fig.5.1. —Front Side.....	4
Fig.5.2. —Rear Side.....	5
Fig.5.3. —I/O Connector-1.....	5
Fig.5.4. — I/O Connector-2.....	6
6. O/P Voltage Data .....	6
Fig.6.1. --- Delay On Time I/P:12VDC O/P:FULL LOAD .....	6
Fig.6.2. --- Delay On Time I/P:24VDC O/P:FULL LOAD .....	7
Fig.6.3. ---Hold Up Time I/P:12VDC O/P:FULL LOAD .....	7
Fig.6.4. ---Hold Up Time I/P:24VDC O/P:FULL LOAD .....	8
7. Test Result.....	8

## 1. Project

AEC-VPMS-200 REV : 0.3

## 2. Team Member

PM : Linux Wang ; PPC H/W : River Yang ; M/E : Peter Pan ; QE : Sean Hsu

## 3. Test Equipments

3.1. DC Power Supply : GW INSTEK PSH-3630 O/P : 36V/30A

3.2. DC Electronic Load : Chroma 63103 16V/60A 300W

3.3. Oscilloscope : LeCroy 9310A DUAL 400MHz

3.4. Digital Multimeter : ST&T DMM 125

## 4. Electronic Test Condition & Spec

NO	TEST ITEM	TEST Condition	SPEC	Result	PASS/FAIL
1.	DC Input Current	IP:12VO/P:FULL LOAD	A	9.09A	-
2.	Input Voltage	IP:12VO/P:FULL LOAD		<input type="checkbox"/> Shut down <input checked="" type="checkbox"/> Normal	PASS
		IP:12VO/P:FULL LOAD		<input type="checkbox"/> Shut down <input checked="" type="checkbox"/> Normal	PASS
3.	Switching Test	Switching Time 0.5S	@12VDC	<input type="checkbox"/> Shut down <input checked="" type="checkbox"/> Normal	PASS
		MIN/MAX LOAD	@24VDC	<input type="checkbox"/> Shut down <input checked="" type="checkbox"/> Normal	PASS
4.	Efficiency	I/P:12VDC O/P:FULL LOAD	%MIN	87.715%	-
		I/P:24VDC O/P:FULL LOAD	%MIN	89.628%	-
5.	Line Regulation	I/P:12VDC~24VDC	±1%MAX	11.96V~11.96V 0%	PASS
6.	Load Regulation	I/P:12VDC	±1%MAX	12.0V~11.96V 0%	PASS
		I/P:24VDC	±1%MAX	12.03V~11.96V 0%	PASS
7.	Over-Voltage Protection	I/P:12VDC			-
8.	Over-Load Protection	I/P:12VDC		140%	-
		I/P:24VDC		161%	-
9.	Short-Circuit Protect	I/P:12VDC			PASS
		I/P:24VDC			PASS
10.	Line Voltage Surge	O/P:FULL LOAD	12VDC~24VDC		-
11.	Line Voltage Sag	O/P:FULL LOAD	24VDC~12VDC		-
12.	Ripple & Noise	I/P:12VDC		550mv	-
		I/P:24VDC		89.1mv	-
13.	Delay on Time	I/P:12VDC	10s(min)	10.34s	PASS
		I/P:24VDC	10s(min)	10.34s	PASS
14.	Hold up Time	I/P:12VDC	ms(min)	1.47ms	-
		I/P:24VDC	ms(min)	7.44ms	-

15.	Rise Time	I/P:12VDC	ms(min)	18.60ms	-
		I/P:24VDC	ms(min)	6.225ms	-
16.	Turn On Overshoot	I/P:12VDC			-
17.	Turn Off Undershoot	I/P:12VDC			-
18.	Remote ON/OFF	I/P:12VDC			-
19.	Power Good Signal				-
20.	Power On In Low Temperature	I/P:12VDC	-15°C		PASS
21.	Power On In High Temperature	I/P:12VDC	60°C		PASS
22.	Chamber Cycles Burn-in test	I/P:12VDC O/P:FULL LOAD	4 Cycles	-15°C~60°C	PASS
23.	On/Off Cycling	Times / on: 20 sec / off: 10 sec			-

## 5. Photos of Product

Fig.5.1. —Front Side





Fig.5.2. —Rear Side



Fig.5.3. —I/O Connector-1





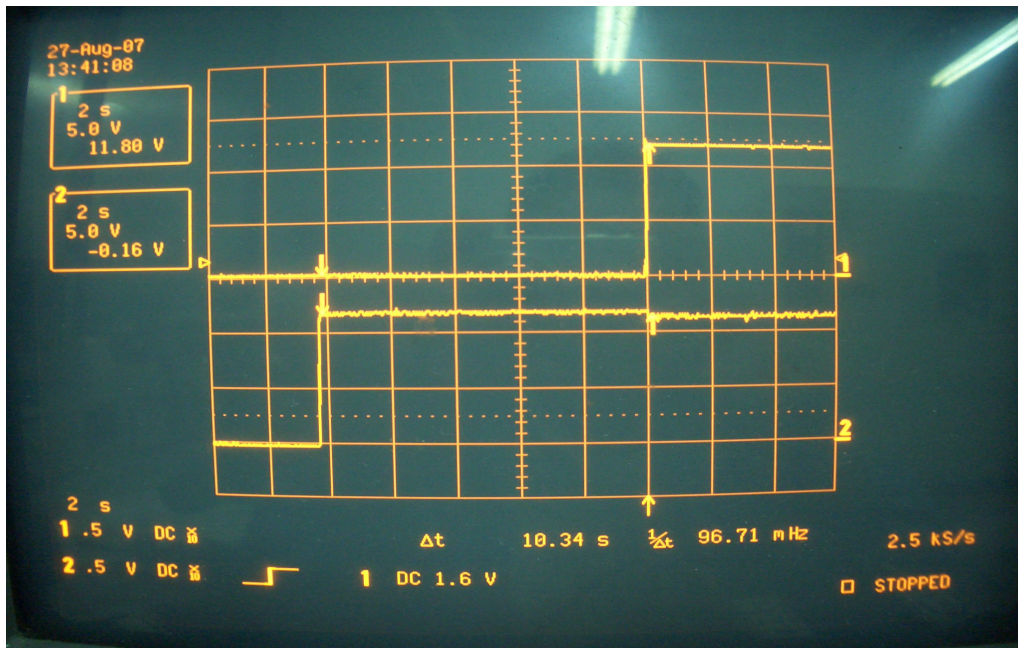
Fig.5.4. — I/O Connector-2



6. O/P Voltage Data

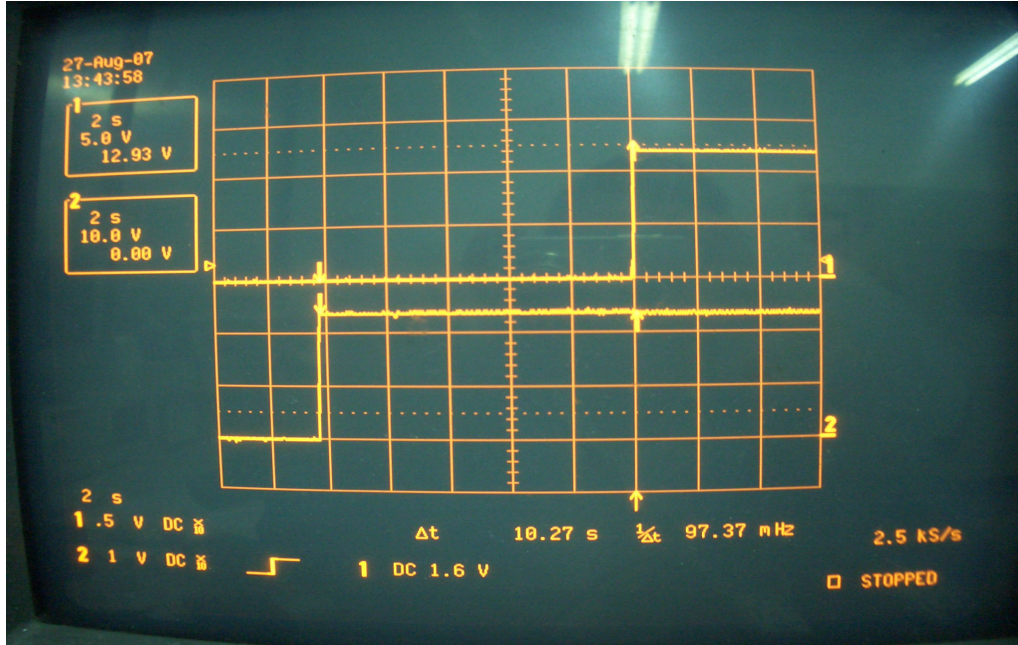
CH1 : Output Voltage CH2 : Input Voltage

Fig.6.1. --- Delay On Time I/P:12VDC O/P:FULL LOAD



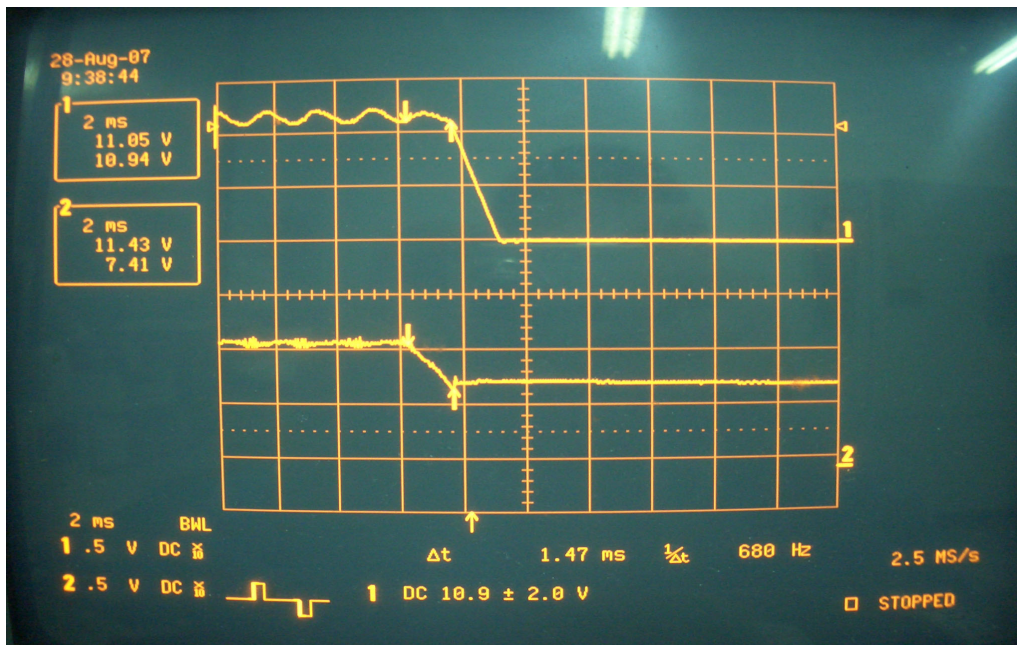
Result:10.34S

Fig.6.2. --- Delay On Time I/P:24VDC O/P:FULL LOAD



**Result:10.27S**

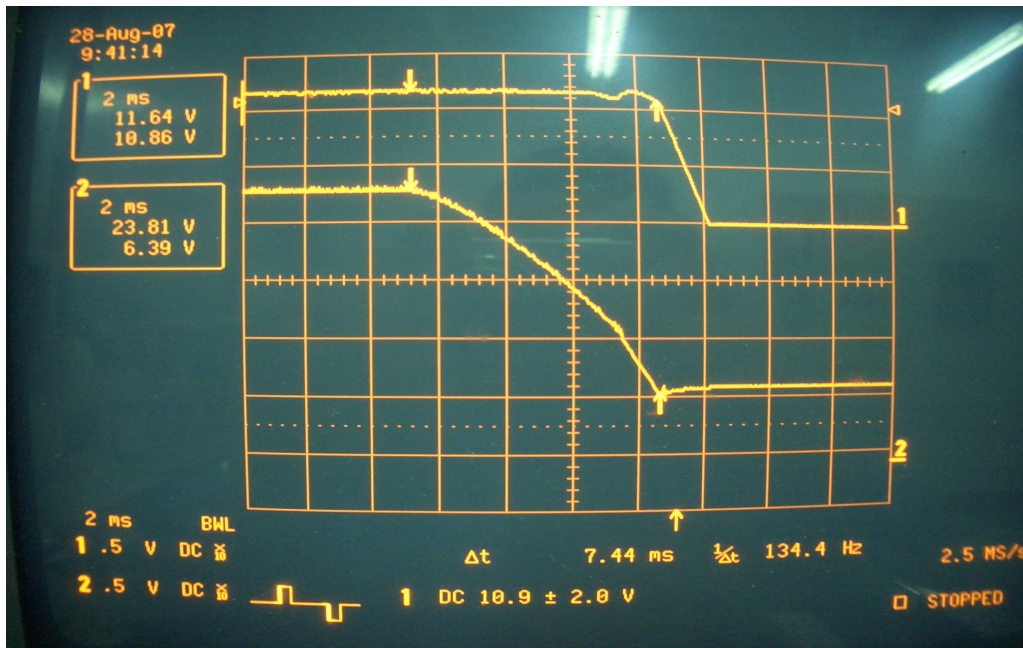
Fig.6.3. ---Hold Up Time I/P:12VDC O/P:FULL LOAD



**Result:1.47mS**



Fig.6.4. ---Hold Up Time I/P:24VDC O/P:FULL LOAD



**Result:7.44mS**

## 7. Test Result

No fault was found during the test