



**TEST REPORT  
FOR  
IEC 61000-4-4 (EFT/BURST IMMUNITY)  
IEC 61000-4-5 (SURGE IMMUNITY)**

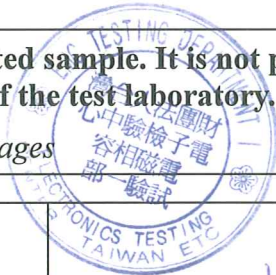
**Report No.: 11-02-MAS-020-05**

Client: **ComMax International Company**  
 Product: **Surge Energy Absorb and Transfer Device**  
           **突波能量吸收及轉換裝置**  
 Model No.: **MAT8-C3-15-Y**  
 Comment Issues: **N/A**

Date test item received: 2011/01/27  
 Date test campaign completed: 2011/02/10  
 Date of issue: 2011/02/25

**The test result only corresponds to the tested sample. It is not permitted to copy this report, in part or in full, without the permission of the test laboratory.**

*Total number of pages of this test report: 5 pages*



Test Engineer   Shin	Checked By   Kevin Lin
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Laboratory Introduction: Electronics Testing Center, Taiwan is recognized, filed and mutual recognition arrangement as following:

- ① ISO9001: TÜV Product Service
- ② ISO/IEC 17025: BSMI, CNLA, DGT, NVLAP, CCIBLAC, UL, Compliance
- ③ Filing: FCC, Industry Canada, VCCI
- ④ MRA: Australia, Hong Kong, New Zealand, Singapore, USA, Japan, Korea, China, APLAC through CNLA
- ⑤ FCC Registration Number: 90588, 91094, 91095



## EFT/BURST IMMUNITY TEST DATA

Test Date: Jan. 27, 2011

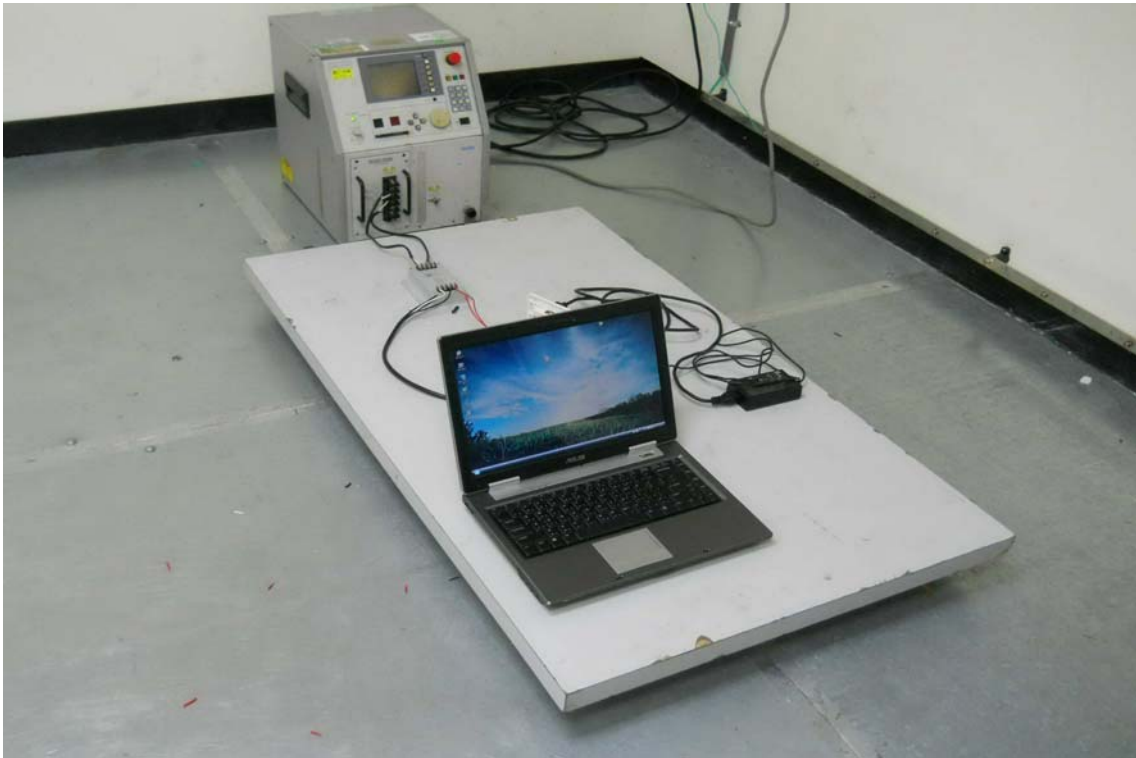
Test Specification	IEC 61000-4-4:2004		
Test Equipment		Calibration Data	Recommended Recal. Date
EFT Generator/Clamp\NoiseKen\FNS-AXII		Mar. 19, 2010	Mar. 18, 2011
Climatic Condition	Ambient Temperature: <u>22</u> °C		Relative Humidity: <u>62</u> % RH
Atmospheric Pressure	<u>985</u> mbar		
Power Supply System	AC Power: <u>380</u> Vac <u>50</u> Hz (3 $\phi$ 4W)		
Operating Conditions of The Device		Operation Mode	

Pulse: 5 /50ns Burst: 15ms /300ms		Repetition Rate: <u>5kHz</u>		Test time: <u>1</u> min/each condition	
\Voltage\Polarity\		<u>4.0</u> kV		___ kV	
\Test Point\Mode\Result\		+	-	+	
Power Line	L1	A	A	--	--
	L2	A	A	--	--
	L3	A	A	--	--
	G	A	A	--	--

Note: " A " means the EUT function was correct during the test.

" -- " means the test is not applicable.

※ Test Method: Conform with IEC61000-4-4 and CNS14676-4 (C6424-4)

**EFT/BURST IMMUNITY TEST SETUP PHOTOS**



## SURGE IMMUNITY TEST DATA

Test Date: Jan. 27, 2011

Test Specification	IEC 61000-4-5:2005		
Test Equipment		Calibration Data	Recommended Recal. Date
Lightning Surge Simulator Noiseken LSS-15AX		Jan. 07, 2011	Jan. 06, 2012
Climatic Condition	Ambient Temperature: <u>21</u> °C		Relative Humidity: <u>53</u> % RH
Atmospheric Pressure	<u>985</u> mbar		
Power Supply System	AC Power: <u>380</u> V <u>50</u> Hz (3 $\phi$ 4W)		
Operating Conditions of The Device	Operation Mode		

Waveform: 1.2/50 $\mu$ s(8/20 $\mu$ s)		Repetition rate: <u>60</u> sec		Times: <u>1</u> times/each condition		Testing port :power port	
\Voltage \Mode \Polarity \Phase \Result			<b>0°</b>	<b>90°</b>	<b>180°</b>	<b>270°</b>	
10.0kV	L1 - L2	+	A	A	A	A	
		-	A	A	A	A	
	L1 - L3	+	A	A	A	A	
		-	A	A	A	A	
	L2 - L3	+	A	A	A	A	
		-	A	A	A	A	
	L1 - G	+	A	A	A	A	
		-	A	A	A	A	
	L2 - G	+	A	A	A	A	
		-	A	A	A	A	
	L3 - G	+	A	A	A	A	
		-	A	A	A	A	

Note: "A" means the EUT function was correct during the test.

"--" means the test is not applicable.

※ Test Method: Conform with IEC61000-4-5 and CNS14676-5 (C6424-5)

**SURGE IMMUNITY SETUP PHOTOS**