M7000

Auto I-V-L Test System

Automatic Test of Various Optical Characteristics of Display Devices

The M7000 Auto I-V-L Test System is for multi-channel testing of display devices with a common optical detector such as spectroradiometer or colorimeter which changes its measurement position automatically   by 3-axis positioner. Test items cover wide range of display testing area, not only the basic display device characteristics, but also their long-term variation upon time including lifetime measurement. The system has three sub-models based on power driving methods, PMX for unit cell device and PMOLED panel, AMX for AMOLED panel, and MDX for OLED module with driver IC.
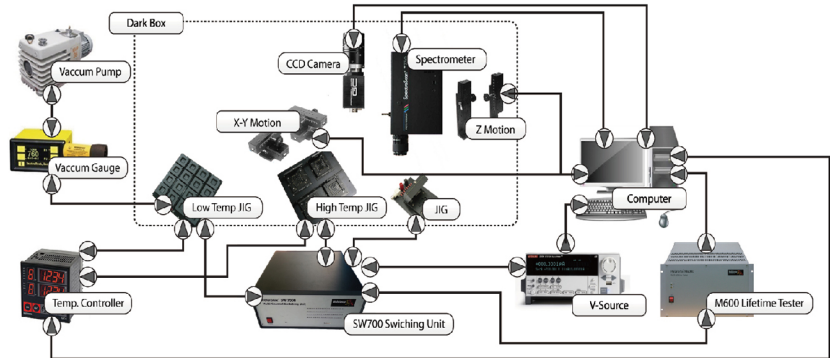
I-V-L + **EL Spectrum** + **Color** + **Lifetime** + **Multi-Channel** + **Automation**

Multi-Channel I-V-L & Lifetime Test
Optical Detector Auto-Align & Auto-Focusing
Unit Cell / AM & PM Panel / Module
Individual Temperature Control
Luminance / Color / Spectrum Measurement
Luminous / Power / Quantum Efficiency
Capacitance & Impedance Measurement
View Angle
Image Sticking

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System Configuration

System Components

<LUMO200 Spectroradiometer>	
<HEXA70 Colorimeter>	
<CS-2000>	
<M600 Lifetime Tester>	
<K2400>	
<MC960 JIG>	
<PR-655>	
<SR-3A>	
<PR-730>	
<SW700 Switching Unit>	
<K2635B>	
<M770 FPD Optical Test Software>	

System Specification

Product Model	M7000 Auto I-V-L Test System				
Standard Model	PMX : Cell / AMX : Panel / MDX : Moduel				
System Configuration	Lifetime Tester, Driving Unit, JIG, Spectroradiometer, XYZ Motion Stage, Test Software				
Channel	Standard 32ch				User Selectable
Motion Stage	Type	XYZ Auto Control Linear Motion (User Option : Ratation Auto Motion for Viewing Angle Measurement)			
	Stroke	X : 1,000mm, Y : 1,000mm, Z : 300mm			
	Resolution	±0.1mm			
	Vision	CCD Camera for Alignment and Focusing			
Driving Source	Model	PMX	AMX	MDX	
	Type	Lifetime Tester & SMU	Panel Pattern Generator	Module Pattern Generator	
	Operating Mode	Simple Power (2 Probe/4 Probe)	Main Power, Sub Power, Signal	Display Interface (RGB, LVDS, MIPI)	
	Voltage Range	Max. 20V	Max. 20V	Max. 20V	User Selectable
	Current Range	Max. 1A	Max. 1A	Max. 1A	
Optical Unit	Type	Colorimeter / Spectroradiometer			User Selectable
	Wavelength Range	380nm ~ 780nm			User Selectable
User Option	Thermostation, Viewing Angle, Impedance Measurement, Flexible Device				
Measurement Time	Motion Movement Time + Vision Process Time + Measurement Time				
Measuremtn Item	Time, Voltage, Current, Luminance, Efficiency, CCT, CRI, Chromaticity, Spectrum, Temperature				
PC Interface	TCP/IP, RS-232, USB2.0				

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