

## Flat Panel Display Performance Measurement Systems

### Complete electro-optical characterization for all FPD technologies

#### FPM Systems – Exceeding your expectations

- **Quantify Display Quality** – Measure uniformity, contrast ratio, viewing angle, shadowing, chromaticity, color gamut, response time, flicker, gamma, specular and diffuse reflection, power consumption, and more!
- **Multiple system configurations** – Choose a baseline system from our family of 18 standard FPM models according to your display size, system enclosure, number of axes, and thermal chamber requirements.
- **Extensive options** – Start with a baseline system and choose from over 100 hardware and software options for test pattern generators, power supplies, meters, photometer and spectroradiometer interfaces, CCD cameras, reflection apparatuses, VESA FPDM / ISO 13406-2 / TCO'99/03 tests, temperature chambers, Auto Loader Unloader (ALU), light safe enclosures, goniometers, display fixturing, and more!
- **ViewPoint™ software** – Includes the graphical Manual Control Interface to all system assets and fully automatic testing with National Instruments' **TestStand™** and custom Active X test objects.
- **Flexibility** – Test large and small panels; test modules and deep assemblies; test TFT, STN, Plasma, OLED, and emerging technologies.
- **Customize your system** – Tailor your test sequences and options to perfectly suit your unique requirements. Create custom test reports in Excel.
- **On-site set-up and training** – Our engineers provide on-site system set-up, alignment, classroom and laboratory training with each delivery. We ensure your team gets the most from the FPM System.
- **Customer support** – Post delivery support includes email and telephone assistance directly from our engineering team. Web page resources include software updates, user's manuals, technical bulletins, and more. Extended support contracts are renewable on an annual basis.



NEW! FPM-515-TC-ALU



FPM-505



FPM-500



FPM-510



FPM-520

#### Need more information?

See our fully updated web page for system selector guide, capabilities, options descriptions, and basic specs.

[www.displayquality.com](http://www.displayquality.com)

#### Need some help now?

Call our engineering hotline at **636-300-5102** to discuss your unique display test & measurement requirements and let us configure the optimal FPM System for you!

## FPM System Specification Summary:

FPM System Series:		FPM-3x0 Series	FPM-3x5 Series	FPM-3x5-TC Series	FPM-5x0 Series	FPM-5x5 Series	FPM-5x5-TC Series
System Configuration	No. of Axes: Meas. Axis: Surround:	3-Axis Horizontal Open	3-Axis Vertical Enclosed	3-Axis Vertical Thermal Ch.	5-Axis Horizontal Open	5-Axis Vertical Enclosed	5-Axis Vertical Thermal Ch.
LMD Optics (by system size)	FPM- x0x: FPM- x1x: FPM- x2x:	Direct view Direct view Direct view	Direct view Direct View Direct View	F/O Coupled F/O Coupled F/O Coupled	Direct view Direct view Direct view	Direct view F/O Coupled F/O Coupled	F/O Coupled F/O Coupled F/O Coupled
DUT Max. Diagonal (by system size)	FPM- x0x: FPM- x1x: FPM- x2x:	15" 37" 67"	29" 45" 55"	39" 45" 55"	17" 24" 48"	24" 45" 55"	39" 45" 55"
DUT Max. Weight (by system size)	FPM- x0x: FPM- x1x: FPM- x2x:	60 lbs. (27kg) 60 lbs. (27kg) 60 lbs. (27kg)	60 lbs. (27kg) 60 lbs. (27kg) 60 lbs. (27kg)	60 lbs. (27kg) 60 lbs. (27kg) 60 lbs. (27kg)	20 lbs. (9kg) 40 lbs. (18kg) 60 lbs. (27kg)	20 lbs. (9kg) 60 lbs. (27kg) 60 lbs. (27kg)	60 lbs. (27kg) 60 lbs. (27kg) 60 lbs. (27kg)
XYZ Range, FPM-x0x	X:	12"	23"	31"	12"	23"	31"
	Y:	12"	23"	23"	12"	23"	23"
	Z:	12"	23"	12"	12"	23"	12"
XYZ Range, FPM-x1x	X:	30"	36"	36"	30"	36"	36"
	Y:	30"	28"	28"	30"	28"	28"
	Z:	30"	23"	12"	30"	12"	12"
XYZ Range, FPM-x2x	X:	54"	44"	44"	54"	44"	44"
	Y:	48"	36"	36"	48"	36"	36"
	Z:	48"	23"	12"	48"	12"	12"
LMD Working Distance (by system size)	FPM- x0x: FPM- x1x: FPM- x2x:	9.5"~20.4" 13.0"~42.0" 26.0"~71.0"	12.6"~35.0" 12.6"~35.0" 12.6"~35.0"	8.0" 8.0" 8.0"	9.5"~20.4" 13.0"~42.0" 26.0"~71.0"	12.6"~35.0" 8.0" 8.0"	8.0" 8.0" 8.0"
<b>LMD Options:</b>	Supported photometer / spectroradiometer Interfaces				BM-5A, BM-7, BM-7-FAST, SR-2, SR-3, OL-750, OL-770, CAS-140B, CS-1000A, PR-650, PR-880A, PR-705, PR-715.		
	Supported analog sensors				TRD-100A, any analog signal 0-5 volts.		
	Supported Video Photometers & CCD Cameras				Radiant Imaging's ProMetric, Kodak MegaPlus, Pulnix, Q-Imaging Retiga.		
<b>DUT Drive Options:</b>	All-In-One Systems				Westar T-Drive™ Universal TFT Tester		
	Test Pattern Generators				Astro VG Series, Quantum Data QD Series, Leader Technologies, ITES LD99/00, Take Systems.		
	Programmable Power Supplies				Sorensen DLM / DCS Series, Agilent 66000A, AMREL PDS Series.		
	Digital Meters, SourceMeters, etc.				Agilent 34401A, 3548A, Keithley 2001, 2400.		
<b>Standards / Custom Test Capability:</b>	VESA FPM 2.0, TCO '99/03, "Dell Appendix A1," ISO 13406-2, MIL-L-85762A, & Custom Tests						
<b>System PC Specs:</b>	Dell Pentium-IV, 15" Flat Panel Monitor, Windows XP, Excel XP, HDD, CD-ROM, 5xRS-232, USB.						
<b>On-Site Setup &amp; Training:</b>	System delivery includes 1 day of on-site set-up plus 1-2 days of classroom / laboratory training.						

Specifications subject to change