MICROVISION

RTM-3 Response Time Module

APPLICATIONS

- OLED, LCD & PDP Displays

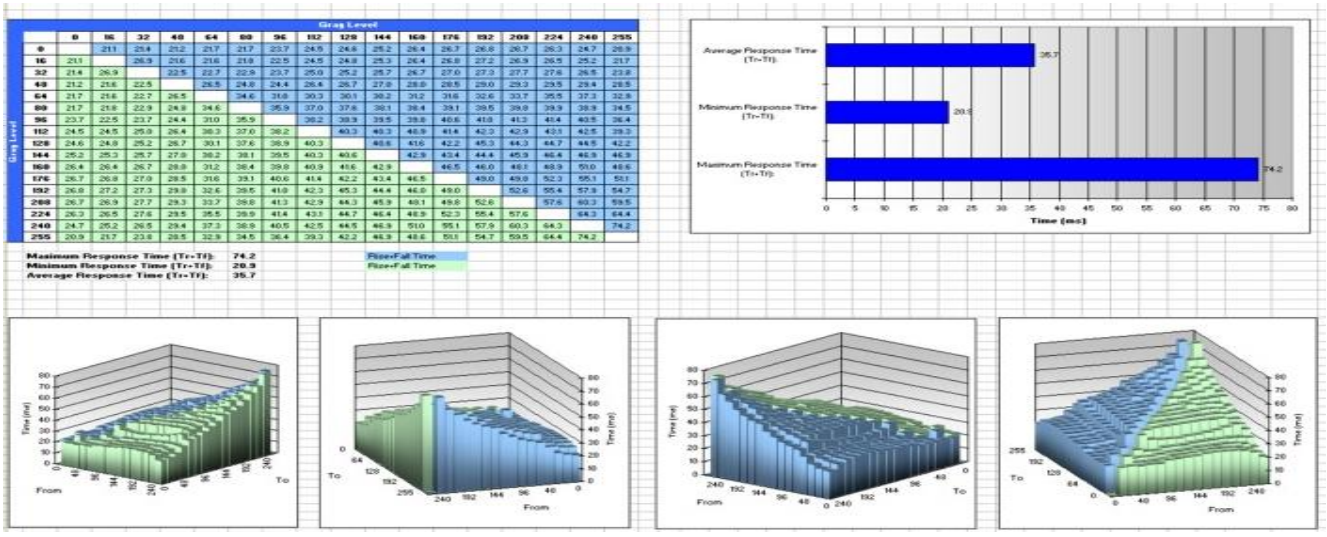
MEASUREMENTS

- Motion Blur & Artifacts
- MPRT
- Response Time
- Gray Level Transition Time
- Overshoot Percentage
- Flicker

FEATURES

- Fully Automatic Testing
- Auto Gain/Scaling
- Customizable Setup
- Proprietary Filtering Algorithms
- Large Dynamic Range
- BNC Output for Oscilloscope
- 2D and 3D Plots & .csv File Output

RTM-3 Unit on Stand



SYSTEM OVERVIEW:

The RTM module can be used on its own or integrated into the SS400 series display analysis system.

The RTM sensor consists of a variable focus aperture lens system imaged on a photodiode. The photodiode output is filtered and then input into a 16-bit data acquisition card with a variable sample rate and gain.

The response time functions is designed to measure Rise (T_{on}) and Fall (T_{off}) times of a blinking target as specified in ISO-9241 and VESA FPDM 2.0, section 305-1. Please refer to these documents for the specification requirements and note on the general Response Time Measurement Procedure.

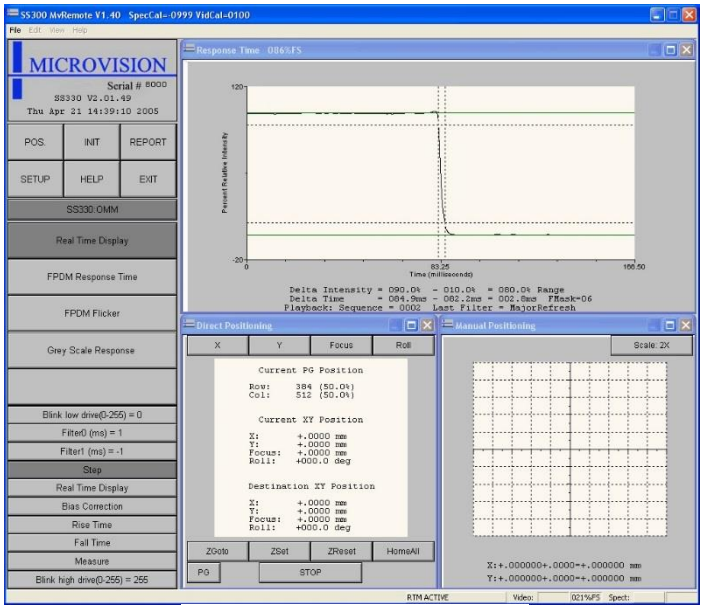
Also included is an automatic gray level transition time measurement. The response time module can measure as array of gray levels automatically from 0-255.

The standard RTM-3 has a minimum measured transition time of 100µs making it suitable for LCD and plasma displays. The High-Speed version (RTM-HS) has a minimum measured transition time of 10 µs making it suitable for OLEDs as well.

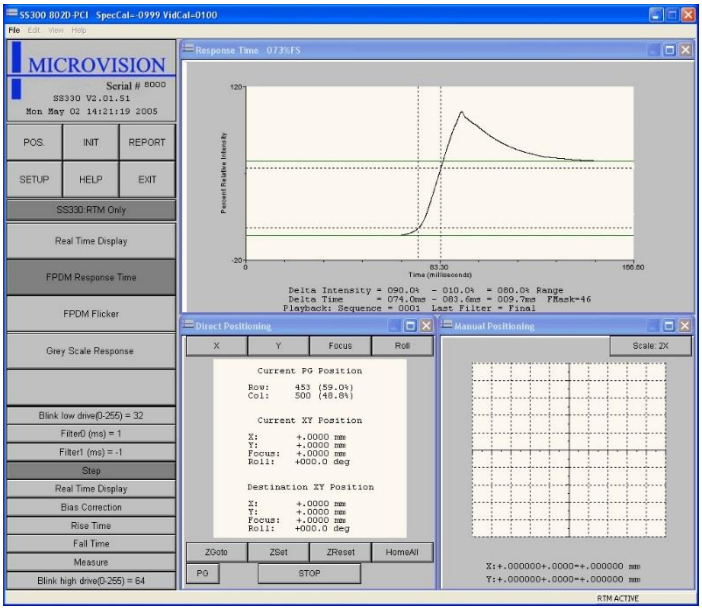
RTM SPECIFICATIONS:

Optical Type:	Photodiode
Samples Rate:	100khz or 1Mhz (RTM-HS)
Resolution:	16-Bit
Detector Response:	10kHz or 100kHz (RTM-HS)
Transition Time:	0.1ms to 4 sec
(RTM-HS)	0.01ms to 4 sec
Lens:	25mm ñCòmount, f1.6 to f22
Sync:	Software
Repeatability:	3%
Interface:	USB

Specifications are subject to change without notice.



Fall time



Rise time with overshoot