

# There's a better way to measure color

Get high-accuracy non-contact color measurements quickly and reliably in challenging industrial settings with this state-of-the-art spectrophotometer.

FluxData  
**SpectraNova**  
D8-M2





**IN-LINE  
NON-CONTACT**



**REAL TIME**



**COMPACT**



**DURABLE**

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### **Designed for Industrial Applications**

The SpectraNova D8-M2 is designed from the ground up with reliability and efficiency in mind. The measurement head is sealed to protect the integrating sphere from the factory environment using a sapphire window, which is easily cleanable in the field. Measurements are reported instantly to your software through a machine-to-machine interface, ensuring accuracy and eliminating the need for a human operator.

### **Non-Contact**

FluxData's spectrophotometer does not touch the sample during the measurement process thus preventing damage to the sample, while also avoiding cross-contamination. This in-line non-contact quality control system for industrial use provides non-destructive color measurement and continuous reporting.

### **Features**

- Outputs reflectance and CIE colorimetric data
- Designed specifically for color quality control
- Non-contact measurement for delicate parts
- Compact fiber-coupled measurement head
- Rapid measurement cycle (<150 msec)
- 2 x 2 mm measurement area
- Protective sapphire window on measurement port
- External trigger I/O available for synchronization
- TCP/IP-based server software
- NIST-traceable
- Calibration tiles included
- Minimal maintenance required

### **Rapid**

A complete measurement cycle takes less than 150 milliseconds, enabling throughputs of over 500,000 samples per day. Multiple systems can be linked and synchronized to measure several areas simultaneously.

### **Compact**

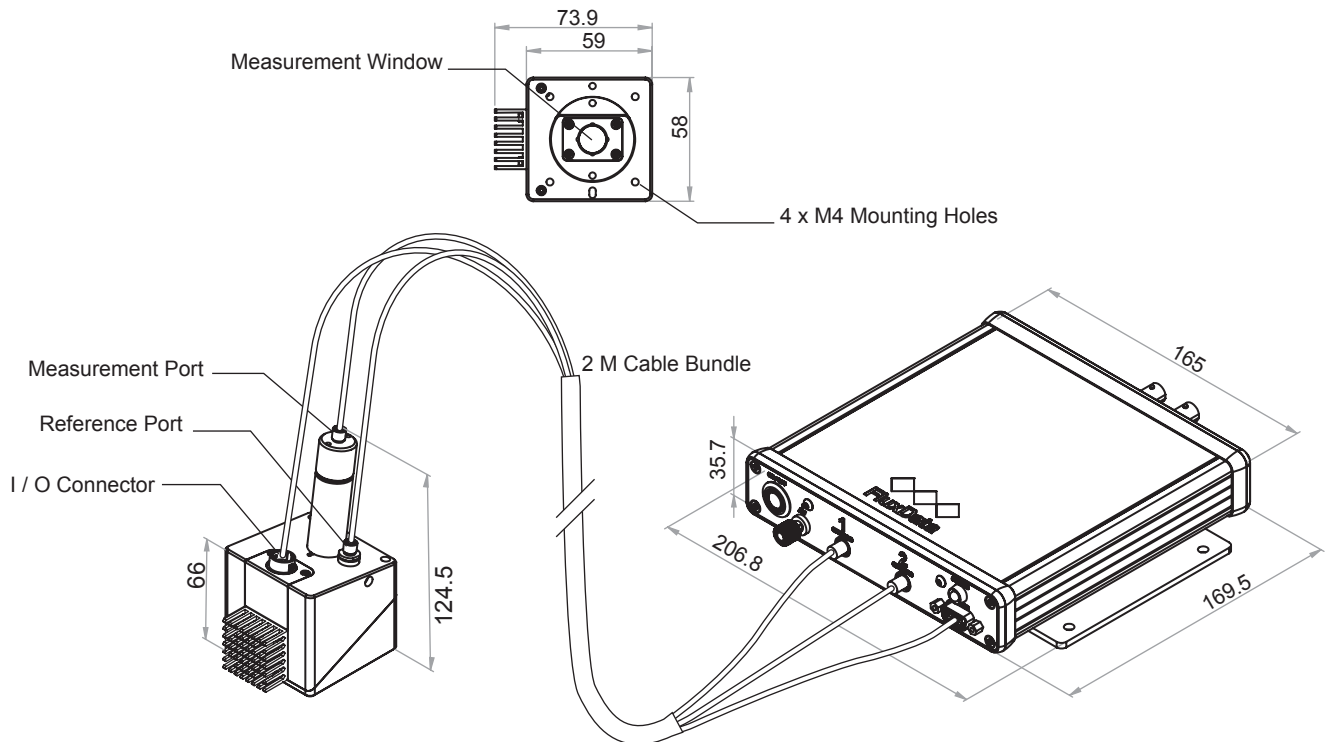
The measurement head's small footprint allows it to be placed virtually anywhere on a production line, with supporting electronics housed in a separate enclosure.

### **Correlates with QC Laboratory Systems**

In-line color measurement and evaluation of color deviation enables complete coverage of production runs that correlate with quality control laboratory systems.

# SPECTRANOVA D8-M2 SPECIFICATIONS

Measurement geometry . . . . .	Diffuse/8°, factory configured as SCI (specular component included) or SCE (specular component excluded), conforms to CIE No. 15
Detector . . . . .	256 element array
Wavelength range . . . . .	400 nm - 700 nm
Wavelength reporting . . . . .	10 nm intervals
Half bandwidth . . . . .	Approx 1.5 nm average
Photometric range . . . . .	0 to 150% with 0.01% resolution. Colorimetric resolution 0.01 CIELAB units
Light source . . . . .	Pulsed LED (UV adjustment factory configured), Lamp life: >250M measurements
Integrating sphere size . . . . .	Ø 50 mm
Measurement cycle time . . . . .	< 150 milliseconds
Measurement distance . . . . .	0.5 mm ± 0.05 mm
Measurement/illumination area . . .	2 x 2 mm measurement / Ø 10 mm illumination (customization available)
Repeatability . . . . .	Standard deviation of 0.01 $\Delta E^*_{ab}$ and 0.04% reflectance (typical) - Measured white calibration tile 100 times at 1-second intervals
Inter-instrument agreement . . . . .	Mean 0.12 $\Delta E^*_{ab}$ (typical) average for 12 ceramic reference tiles, across 40 production systems. Distance measured from the mean of all measurements for each tile. Max 0.4 $\Delta E^*_{ab}$ for 12 ceramic reference tiles.
Interface . . . . .	USB 2.0
Trigger in/out . . . . .	5V, BNC jacks
Operating system compatibility . . . .	Windows 7+, 64 bit
Input power . . . . .	AC 100-250V @ 50-60 Hz, 9.2 VA average (using included AC adapter)
Operating temperature . . . . .	60° to 95° F (15° to 30° C), relative humidity 80% or less with no condensation
Storage temperature . . . . .	-40° to 116° F (-40° to 47° C), relative humidity 80% or less with no condensation
Measurement head dimensions . . . .	(W x H x D) 58.0 x 124.5 x 73.9 mm (2.28 x 4.90 x 2.91 in.)
Measurement head cable . . . . .	Length: 205 cm (80.71 in.), bend radius: 24 cm (9.45")
Acquisition module dimensions . . . .	(W x H x D) 206.8 x 35.7 x 169.5 mm (8.14 x 1.41 x 6.67 in.)
Weight . . . . .	Head: 0.36 kg (0.80 lbs), System: 2.29 kg (5.05 lbs.)



All units are measured in millimeters.



# FluxData

**FluxData, Inc. is an international leader in industrial in-line color process control and measurement.**

Fortune 100 companies trust FluxData to deliver in-line systems customized to their needs, seamlessly integrating with existing systems and manufacturing lines.

FluxData's in-line inspection equipment is used by some of the largest consumer electronics companies in the world and has resulted in dramatic reductions in costs and yield improvements.

FluxData's product line is rapidly expanding and includes customizable multispectral and polarimetric imaging systems for aerospace, industrial, medical, defense, and scientific markets.

*Our experienced team of engineers and color scientists are eager to work with you to customize our solutions to your needs. In addition to overcoming challenges specific to your application, we offer prompt and helpful support, both remote and on-site.*

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