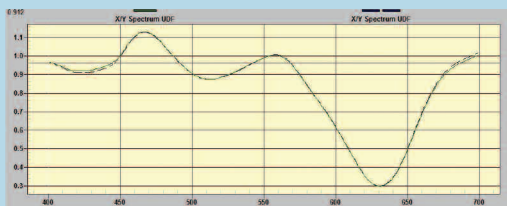


Process Spectral Measurement Sensor System

Product Summary

The Process Spectral Measurement Sensor (SMS) System from microSpectral Sensors is designed to provide customers the ability to take real-time liquid measurements in process environments. This system allows users to test the properties of liquids where and when they want. The SMS System is versatile enough to be used in a process environment or in stand alone OEM equipment applications.

SMS Data From On-Line System



Markets and Applications

Process Plant

- Process Monitoring & Control
- Quality Assurance & Control
- New Product Research

Water Distribution Systems

- Remote Water Quality Measurements
- Contaminant Detection & Alarming
- OEM Water Measuring Products

Systems and OEM Equipment

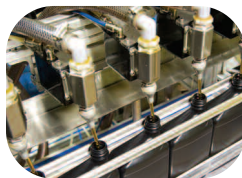
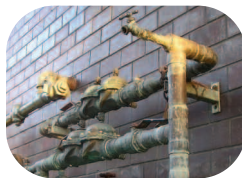
- Remote Water Monitoring Systems
- Stand Alone Water Analysis Systems
- OEM Liquid Process Equipment



The Process Spectral Measurement Sensor (SMS) System

from microSpectral Sensors is a versatile and powerful system for measuring liquid process variables. The sensor system can be deployed into a process application as a spectral sensor-transmitter that sends process data to a host PC, PLC or DCS system. The spectral process data collected from the SMS allows users to capture and record process specific data which enables improved real-time process monitoring and control. The SMS System utilizes microSpectral Sensors' patented, integrated sensing system technology. This technology miniaturizes the core optical system utilized within traditional spectrometers. This technology advancement enables the SMS product to measure and monitor a variety of liquid compounds and parameters

previously requiring off-line analysis in the lab. When the SMS is utilized as part of an automated sampling system, it can capture water and process data that typically requires manual sample taking, and remote testing on specialized laboratory equipment. The SMS System features a powerful PC software program allowing users to build custom data measurement methods that simplify data analysis. The overall capabilities of the SMS System allow users to "take the lab to the process" and accomplish real-time quality control and process monitoring at significantly lower costs than current process measurement systems.



"Take your Lab to the Process!"

Key Features

Versatile Measurement Capabilities

Measures spectral properties of liquids for Process Monitoring and Quality Assurance & Control (QA/QC) applications.

Installation Flexibility

Available as an on-line, or in-line, sensor system for stand alone and process liquid measuring applications. The SMS System can be deployed into a process sampling and measurement system. It can also be integrated into a fluid monitoring system for Original Equipment Manufacturer (OEM) applications.

Powerful PC Software

Allows users to analyze the spectral data generated by the sensor system. Custom measurement methods can be defined with the PC software in order to measure specific fluid properties.

Process Spectral Measurement Sensor System

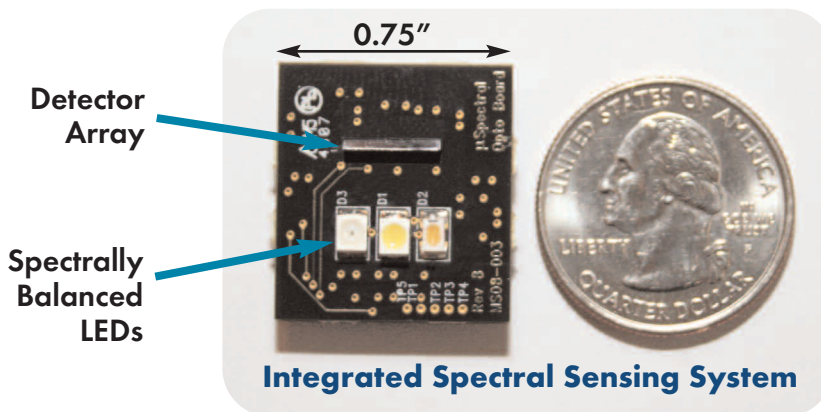
Technology Overview

The Spectral Measurement Sensor (SMS) System features our patented, integrated sensing system technology. The technology consists of a high efficiency, linearized photodiode array detector and high stability, high output, low power LED light sources.

Specifications

Wavelength Range	400 - 700 nm (Visible) 600 - 1100 nm (Near Infrared)
Bandwidth	4 - 7nm (Visible) 6 - 11 nm (Near Infrared) (1% of center wavelength)
Light Source	Spectrally Balanced LEDs
Detector	Linearized Photo Diode Array

Manufacturing Specifications Subject to Change



The Spectral Measurement Sensor (SMS) is ideal for compact on-line liquid measurement applications.

Product Selection

SMS Part Number Matrix

Product Selection	Spectral Measurement Range	SMS Enclosure	Pathlength
SMS	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
	V - Visible (400 - 700 nm) N - NIR* (600 - 1100 nm) C - Custom	1 - General Purpose 2 - Sanitary Process 3 - Custom	10 mm 99 Custom
Example	SMS <input type="checkbox"/> V	<input type="checkbox"/> 1	<input type="checkbox"/> 1 <input type="checkbox"/> 0

Spectral Measurement Sensor System for Visible Light Range in General Purpose Enclosure with 10 mm Pathlength

* Available in 2008