Process Insights
Premium Insights Into Process

Guided Wave

Benchtop 508*plus* UV-Vis Process Analyzer

Guided Wave's Benchtop 508*plus* is a single-channel version of our popular M508*plus* process analyzer. The Benchtop 508*plus* is a fiber optic, UV-Vis spectrometer system packaged for use in either laboratory or pilot plant environments. The small size allows for use in many locations.

In monitoring mode, up to 16 parameters may be measured, making it suitable for many applications in chemical and polymer plants, refining and petrochemicals, pharmaceuticals and other specialty chemicals, paints and varnishes, adhesives, wastewater management, biotech, etc. The software runs on an external computer connected to the analyzer via USB.

The Smart Choice for Online Multiple Parameter Process Monitoring

- Low cost per point - up to 16 parameters
- Less maintenance - light source lasts up to two years
- Safe - no hazardous chemicals inside the analyzer
- Model services available
- Lab-quality validation results (to ASTM standards)

Features

- Rapid data collection with enhanced diode array miniaturized optical bench
- Analyzer control program developed in LabVIEW™ featuring customizable settings and trending capability
- Modbus communications with built-in event setup. Optional Opto 22 panel and communications for 4-20 mA analog and discrete interfacing
- Compatible with Guided Wave's proven probe and flow cell products
- Full spectrum scanning, 200 nm to 850 nm
- Unscrambler® Calibration Model Ready (with optional Unscrambler® Predictor)
- Simple B-Vector and formulaic models
- Built-in Color Analysis
- File formats - GW ASCII/BINARY and Grams SPC

Options

- Unscrambler® Predictor for expanded modeling capabilities

Applications

- L*a*b* and other color coordinates
- Solvent recovery purity
- Maleic acid in tetrahydrofuran (THF)
- Trace (ppm level) impurities in wash water; Clean-In-Place
- Polynuclear aromatics (PNA's) in middle distillates
- Phenol in cyclohexane
- Sodium hypochlorite in bleach solutions
- Aromatics in monomers
- Sorbic acid in water
- Ferrous chloride in acid
- Acetonitrile purity
- Hypochlorous acid
- Antioxidants in polymers and plastics
- Color and clarity of varnishes

Reliable, Rugged, and Flexible

By partnering with Guided Wave you gain the advantage of 35+ years of experience in online process monitoring and stream sample analysis. Our entire product line is designed and developed to meet the challenges of the most demanding production environments. The Pulsed Xenon source lamp used in the Benchtop 508*plus* has a lifetime lasting over two years.

Optimized for Guided Wave Sample Interfaces

The probe or flow cell is a crucial component of a complete analyzer system. For optimal performance, the sample interface must be "optically matched" with the analyzer and the optical fibers that transmit light. All of Guided Wave's sample interfaces are matched to the Benchtop 508*plus* and fibers to achieve the highest possible performance.

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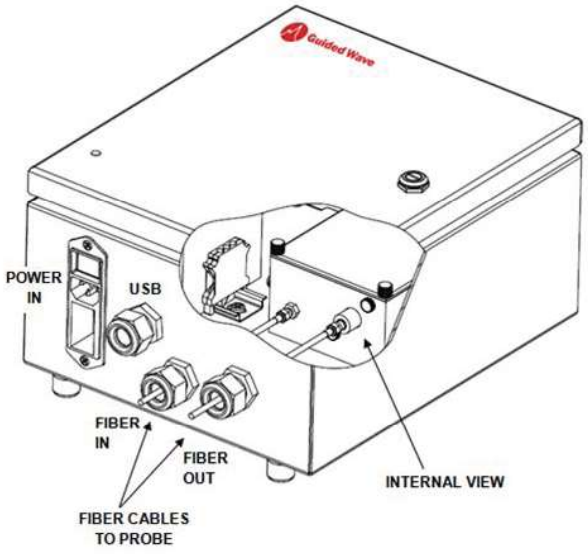
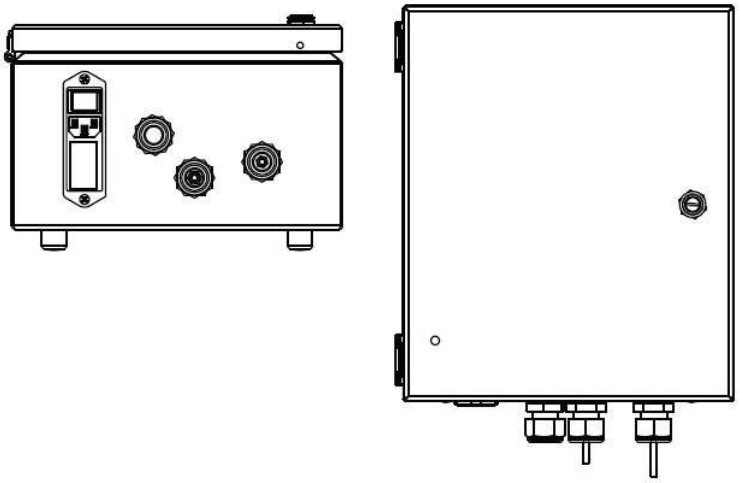


Compact Size for More Space on Your Lab Bench

Dimensions (w x d x h)
12 in x 10 in x 6.18 in; 30.48 cm x 25.4 cm x 15.7 cm
Below: front and top analyzer view



Specifications

Spectrometer Type	Transmission Grating, High Sensitivity Diode Array
Wavelength Range	200 nm – 850 nm
Wavelength Accuracy	±0.1 nm
Photometric Noise	0.8 mAU @ 0 AU, 550 nm, 1 sec
Stray Light	< 0.1 % @ 220 nm
Number of Pixels	2048
Bandwidth	< 3 nm
Dynamic Range	2000:1 for a single scan
Light Source / Life	2 W Pulsed Xenon Lamp / >2 years
Minimum Scan Time	5 millisec
Fiber Optic Connections	SMA 905
Fiber Type	High OH Deep-UV Solarization Resistant
Fiber Diameter	Between 200 µm and 600 µm; 400 µm standard
Communications	Modbus Ethernet TCP or Serial RTU
Software Required	GW5080S UV-Vis (see document #7005)
Operating System	Windows® 7 / 10
Temperature Range	0 °C to 40 °C
Humidity	10% to 90% RH, non-condensing
Power	110/220 Vac 50/60 Hz, 60W
Dimensions (w x d x h)	12 in x 10 in x 6.18 in; 30.48 cm x 25.4 cm x 15.7 cm
Weight	<15 pounds; <6.8 kg
Warranty	2 year limited warranty
RoHS Compliant	Yes