NIRS XDS Process Analyzer – SingleFiber

Features and benefits

- Direct in-line measurement yields real-time analysis and data availability in seconds
- Single fiber optic interface optimized for process streams such as clear liquids and films
- Single point or multiplexed analyzer (four or nine sample channels)
- NEMA 4X/IP65 rated, ATEX ready
- Optional upgrade to hazardous area classification (Class 1, Division 1; Class 1, Division 2; etc.)

Ω Metrohm

Analyzer description

The NIRS XDS Process Analyzer – SingleFiber provides the next generation of process analyzers for real-time analysis in the pharmaceutical and chemical industries. Non-destructive, accurate measurements are performed directly in the process line or in the reaction vessel.

Typical measurements include reaction monitoring and end point determination in refinery, petrochemical and polymer processes, solvent recovery in pharmaceutical API plants, and analysis of extruded polymer films and coatings.

The use of single fiber optics and the associated probes and flowcells allows for cost-effective analysis of a wide variety of sample types such as clear liquids to transparent films.

The analyzer is available as a single point or a multiplexer. Two multiplexer process analyzer configurations provide for up to either four or nine sampling points. This economical means of performing remote measurements enables the analyzer to be installed in an unrestricted area, reducing installation and operation costs.

The patented, robust design of XDS Process Analyzers supplies a new level of consistent, dependable and reliable instrument performance and analysis while operating in harsh industrial environments.

NIRS XDS Process Analyzer – SingleFiber
(shown with optional air conditioner)

NIRS XDS Process Analyzer – SingleFiber Single Point/Multiplexer consists of the following items

- **XDS Process Nema 4X Monochromator**
  XDS NIR technology ensures precise instrument matching and seamless calibration transfer.
  1, 4, or 9 channel process measurement configuration.
  Spectral coverage: 850-2'200 nm (extended InGaAs detector).
  Standard unit operation in environments 0-35 °C (32-95 °F).
- **NIRStandards™ Certified Wavelength Standard**
- **Single Fiber Calibration Fixture**
- **XDS Accessory Kit**
  NA and EU power cords, network crossover cable, replacement lamp, 5A fuse, instrument test guide, XDS CE safety manual, service and warranty documentation
- **NIRS XDS Process Analyzer – SingleFiber Manual**

Requires Fiber Optics and Probes (1, 4 or 9 fiber optic channels and probes)

- **Single Fiber Optic Cable with SMA connections at the analyzer and probe (requires probe or flowcell for use)**
- **Stainless Steel or Hastalloy Probes (custom materials available)**
  Transmission Probe Pair
  Single-sided Transmission Probe
  Transmission Flowcell

Software (requires one of the following)

- **Vision® SC/SP Single-User Vision for Chemical/Pharmaceutical Analysis**
  Spectral acquisition, method development and routine analysis software for chemical/pharmaceutical analysis. Provides single-user access to NIR instruments on a network (one copy of Vision per instrument). Pharmaceutical version is fully validatable and 21 CFR Part 11 compliant software.
- **Vision® MC/MP Multi-User Vision for Chemical/Pharmaceutical Analysis**
  Multiple-user Vision spectral acquisition, method development and routine analysis software for chemical/pharmaceutical analysis. Allows for centralized database management for all spectral databases. Includes 5 workstation licenses. Pharmaceutical version is fully validatable and 21 CFR Part 11 compliant software.

Environmental Options

- **Class 1, Division 1 rated analyzer**
  110/220 V, Purge and Vortex cooled
- **Class 1, Division 2 rated analyzer**
  110/220 V, Purge and A/C cooled
- **ATEX ready analyzer**
  Purge and Vortex cooled
- **A/C cooled (no purge) analyzer**
  110/220 V, for environments 0-51 °C (32-125 °F)
- **Vortex cooled (no purge) analyzer**
  110/220 V, for environments 0-40 °C (32-104 °F)

Process Communication Options

- **OPC**
- **Digital Protocols**
  MODBUS, PROFIBUS, etc.
- **VISION I/O Module**
  Available as 8, 16, or 24 Analog Channels, 24 Digital Channels

Ordering information

2.928.0210	NIRS XDS Process Analyzer – SingleFiber SinglePoint
2.928.0220	NIRS XDS Process Analyzer – SingleFiber 4 Channels
2.928.0230	NIRS XDS Process Analyzer – SingleFiber 9 Channels

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