

E-NET In-Line Process Refractometer

EtherNET – THE SUPER HIGHWAY TO EASY 2-WAY COMMUNICATION

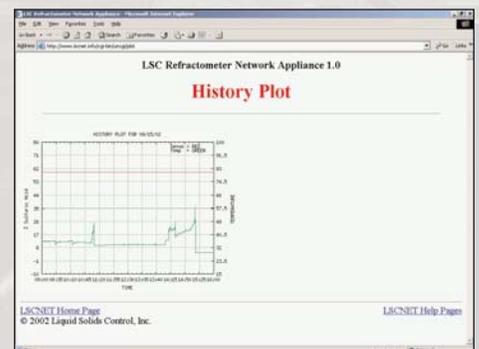
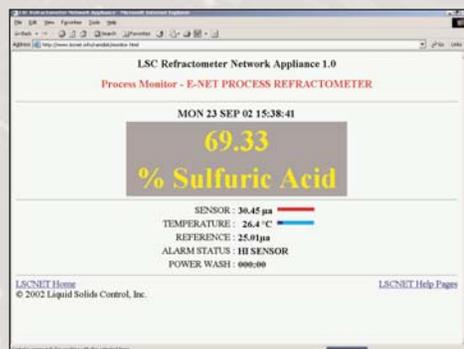
LSC

LIQUID SOLIDS CONTROL



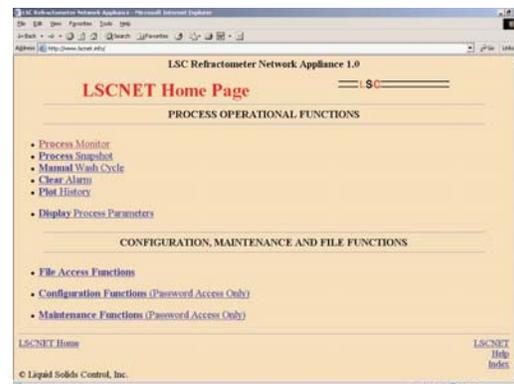
Liquid Solids Control is stepping out front once again with the E-NET Process Refractometer. Its revolutionary design incorporates an EtherNET connection, which allows remote access to all operational parameters from any PLC or DCS connected to the customers Local Area Network (LAN).

The fully computerized LSC E-NET In-Line Refractometer is a two-piece optical/electronic measurement instrument. Our design employs the "I.R. Detection System" which provides Infinite Resolution while eliminating drift. At the interface, light is reflected and refracted off the process, at different angles, depending on the refractive index (optical density) of the process fluid. This technique continuously measures the concentration of the process stream and is commonly displayed in terms such as, Brix, Refractive Index, % Solids, Etc.



EtherNet Connectivity Allows Remote-Access Diagnostics & Troubleshooting Through A LAN

Communicating via the EtherNet connection (RJ-45 Port) will truly revolutionize the way customers view and utilize an In-Line Process Refractometer. Providing a direct link to all of the refractometer's information gives the customer the flexibility and convenience of interfacing with the unit from any location within the plant's network (instrument/maintenance shop, control room or even a PC computer). Any standard web browser will work with the E-NET Refractometer so, Engineers/Instrument Technicians will simply point and click to change and/or view any of the parameters of the refractometer (diagnostic screens, multiple calibration files, history and event files... to name a few). Communicating through EtherNet eliminates protocol issues associated with various control manufacturers and avoids the need for specialized software. Multiple level customer defined password protection allows limited access to key operational and diagnostic functions, while still allowing access to data for control, trending and spreadsheets.



The LSC Sensing Heads, In-Line or Insertion Probe, are mounted in a manner so as to ensure the prism (sensing window) is in direct contact with the process. The wetting of the prism face provides the physical properties necessary for the "critical angle" measurement. Entrained air, viscosity, suspended particles and crystals, color (whether opaque or transparent), will have no effect on the accuracy of the LSC E-NET Process Refractometer.

Our standard material is 316L Stainless Steel. We can supply our products in other various "exotic" materials such as: Hastelloy B/C, Tantalum, Alloy 20, Titanium, Kynar, Teflon, Monel, Nickel or others, as required by the customer. Various End Fittings and Flanges are also available.

Refractive Index Spectrum: 1.3000 to 1.6000
Concentration, % Solids or Brix Spectrum: 0-100%
Accuracy +/- 0.5 % of Selected Span Range
 +/- 0.0 % With Internal Computer Correction
Overall Stability/Drift: No Measurable Drift
Input Power: 85 to 260 VAC, 50/60Hz, < 25 Watts
 (Automatic Sensing of Input Power)
 Optional: DC Input Power
Process Temperature Range: -25 to 150° C
Temperature Compensation: Automatic, Electronic
Process Measurement Output: Ethernet
Optional: Process Measurement Output: 4-20mA

Process Temperature Output: Ethernet
Communication/Diagnostic Port: RJ-45 Port
Sensing Head(s): 316L SS, Sealed Against Any Moisture/Condensation
Sensing Window (Prism): Sapphire
Electronic Enclosure: Environmentally Proven NEMA 4 X SS
Electronic Enclosure Ambient Temperature: Up To 45°C
Process Line Pressure: Can be up to 1000 PSIG (68 Bar)
Interconnecting Cable: Any Length, Up To 1625 FT. (500 Meters)

LSC Model E-NET's Exclusive Five Year Warranty Affirms Its Reliability

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