Data Communication Options

Electronic Interface Enclosure

Analog

Serial

Ethernet IP

**CIM**
Customer Interface Module
Features a Max. of Eight 4-20 mA Outputs, Alarms and Input

**PLC**
Programmable Logic Controller
For use when 4-20 mA Outputs are greater than eight

**RS-232**
Modbus RTU
Direct from Analyzer to Terminal Block in EIE

**Modbus TCP/IP**
SUB-D RS-232 terminal for temporary laptop connection available in lower enclosure

**AB Ethernet IP**
(Allen Bradley)
RS-422/485 Converter
Typically used when connecting to Allen-Bradley Plant System

Contact Your Local Representative for Additional Information:

www.ChemScan.com
**Wastewater Filter Options**

<table>
<thead>
<tr>
<th>Filter Type</th>
<th>Required/Needed Conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Typical Applications</td>
<td></td>
</tr>
<tr>
<td>- aeration basins</td>
<td></td>
</tr>
<tr>
<td>- SBR (sequenced batch reactors)</td>
<td></td>
</tr>
<tr>
<td>External Filter Required</td>
<td>TSS is greater than 150 mg/L NTU is greater than 60</td>
</tr>
<tr>
<td>No Filter Needed</td>
<td>TSS is less than 150 mg/L NTU is less than 60</td>
</tr>
</tbody>
</table>

**In-Situ Cyclic Filter (In-Tank Wand)**
- Run is less than 50 ft
- Lift is less than 10 ft
- Maximum of Four Filters/ Sample Lines per Analyzer
- No external pump required
- * SBR Applications Require Pivoting Wand Mount - Std. Wand is Fixed Angle
- Freeze protected (Heat Traced option available)

**Flow-Through Cyclic (FTC) Filter**
- Run less than 500 ft
- Maximum of Four Filters Per Analyzer

**Cross-Flow Filter**
- Run is less than 1500 ft.
- Maximum of 8 Sample Points Per Filter System

**Sample Circulation Chamber (SCC)**
- For coarse screening. Algae screening protects analyzer inlet screens and reduces maintenance.
- Typical applications include post secondary clarifier.
- TSS is less than 150 mg/L, NTU is less than 60
- Run is greater than 20 ft
- Lift is greater than 5 ft
- Maximum of Eight Sample Lines
- External Pump(s) Required
  - Provided by ASA or Others
  - 3 - 10 GPM

**Sample Extraction Accessory**
- For use with the ChemScan mini analyzer. Provides a pressurized sample.
- TSS is less than 150 mg/L, NTU is less than 60
- (Includes Pump and Sample Circulation Loop Assembly)

**Legend**
- TSS - Total Suspended Solids
- NTU - Nephelometric Turbidity Units
- GPM - Gallons Per Minute
- Run - Horizontal Distance to Sample Point
- Lift - Vertical Distance to Sample Point

**Other Accessories**

**Heat Traced Cyclic Sample Line**
- Flexible conduit prevents freezing and damage to sample line. An option for any cyclic wand application.

**Sample Circulation Pumps**
- **Outdoor Enclosure**
  - Providing a stable environment for the ChemScan mini along with the ability to locate the analyzer near the sample site.

**Filter Wand with Disposable Cartridge**
- Simple design, no cleaning air, water or chemicals required. Inexpensive operational cost.

---

**Light Duty, Submersible Pump**
- 1.3" Max. Dia. Solids
- Weight: 20 - 30 lbs
- Power: 1/4 - 3/4 HP, 120 VAC 60 Hz
- Power Cable: 20 feet
- 12 foot SS support cable

**Heavy Duty, High Head, Submersible, Grinder Pump**
- Cast Iron Construction.
- Weight: 70 lbs
- Power: 2.3 HP 230 or 460 VAC
- Power Cable: 30 feet
- Mounting: Dual guide bars
- Note: Guide bars are typically provided by others