The AM-2250 series is built on the legacy of the Shark and 2200 controllers. Like its predecessors it is designed to be the most flexible, easy to use, and easy to see multi-parameter controller on the market.

Four Parameters
Select the parameter you wish to measure from the easy-to-use menu. Choose Conductivity, pH, ORP or Flow. The user interface was designed under the principle that the user should not need to read the manual.

Three Relays
The AM-2250 provides control of external devices using its three independent control and alarm relays. Each relay has adjustable high, low, and in range set-points, cycle timer with adjustable on and off times. This feature enables tighter control of batch processes by eliminating chemical overshoot. Third relay can be activated by temperature or flow totalizer reading as well.

Analog Outputs
The AM-2250 provides two isolated, independent and scalable 4-20 mA outputs. One 4-20 mA output can be configured for PID control. The second 4-20mA output can be set for process or temperature.

Zero Cards
The AM-2250 comes complete. There are no extra costs associated with buying boards for different sensors, or buying components to achieve NEMA 4X.

Enclosure
The AM-2250 is packaged in a rugged NEMA 4X polycarbonate enclosure making it ideally suited for indoor and outdoor heavy-duty applications. A mounting kit is included for surface and panel mounting. The enclosure outline makes panel-mount cutouts simple. Pipe mounting kits are available.

One Big Display
The AM-2250 features a backlit LCD display can be seen from a distance. The keypad allows easy entry of menu items and numeric values.

Calibration
No other controller offers the same combination of flexibility and ease for calibration. The process value is visible during calibration so the user knows when it has settled down. Calibration of pH can be with 2 or 3 points. Calibration of conductivity can take as many as 16 points so acids and bases can be measured through their conductivity. All Calibration data is stored.
## Technical Data

<table>
<thead>
<tr>
<th>Probe Parameters</th>
<th>pH</th>
<th>ORP</th>
<th>Conductivity</th>
<th>Flow</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sensor</td>
<td>6-Wire Differential or Combination</td>
<td>6-Wire Differential or Combination</td>
<td>4-Wire contacting: Any cell constant between 0.01 and 100</td>
<td>Pulse output: Paddle-wheel, Magmeter</td>
</tr>
<tr>
<td>Temperature Elements</td>
<td>100, 1000 Ω RTD 300, 3000 Ω NTC or none</td>
<td>100, 1000 Ω RTD 300, 3000 Ω NTC or none</td>
<td>100, 1000 Ω RTD 300, 3000 Ω NTC</td>
<td>n/a</td>
</tr>
<tr>
<td>Sensor Input</td>
<td>-600 to +600 mV</td>
<td>-999 to +999 mV</td>
<td>0 to 9999 Ω</td>
<td>0 to 2000 Hz</td>
</tr>
<tr>
<td>Measurement Range (Process)</td>
<td>0 to 14 pH</td>
<td>-1000 to +1000mV</td>
<td>0.055 to 500,000 µS/cm (Depending on the cell constant)</td>
<td>0 to 999 in any units</td>
</tr>
<tr>
<td>Measurement Range (Temperature)</td>
<td>-20 to 120 °C</td>
<td>-20 to 120 °C</td>
<td>-20 to 120 °C</td>
<td>Flow Totalizer 0 to 999 in any units</td>
</tr>
<tr>
<td>Temperature Compensation</td>
<td>Automatic or none</td>
<td>Display temperature</td>
<td>Automatic or Manual -20 to 120 °C</td>
<td>Display Flow Totalizer</td>
</tr>
<tr>
<td>Calibration modes</td>
<td>pH: Automatic or Manual 2 or 3 points</td>
<td>ORP: Manual 1 point</td>
<td>Up to 16 points</td>
<td>K factor input</td>
</tr>
</tbody>
</table>

### Outputs

- **Analog**
  - Two 4-20 mA outputs
  - Scalable 4-20mA with PID (Process)
  - Scalable 4-20mA (Process or Temperature)
  - Optically isolated. Max Load = 800 Ω

- **Relays**
  - 3 Dry contact relay with snubber circuit
  - 10A @ 120/240 VAC or 8A @ 30 VDC (Resistive Load)
  - 5A @ 120/240 VAC or 4A @30 VDC (Inductive load)

- **Relay Modes**
  - Rising/Falling/In Range.
  - Options: Relay Delay, Cycle, Overfeed Timer, Override
  - One relay can be triggered by temperature or flow totalizer.

### Ratings

- **Ingress Protection**
  - NEMA 4X

- **Electrical**
  - ETL (US and Canada) and CE pending

- **Max. Power Input**
  - 0.2 A @ 115 VAC or 15 W

- **Temperature**
  - -20 to 70 °C

- **Humidity**
  - 0 to 90% Relative Humidity, non-condensing

### Physical

- **Mounting**
  - Wall mount, panel mount with kit provided, pipe mount with optional kit

- **Dimensions**
  - Front cover: 5.5”x5.5” (14 cm x 14 cm), Depth: 5” (13 cm)

- **Power**
  - 120/240 VAC, 50 or 60 Hz

- **Weight**
  - 2 lbs

- **Protection**
  - NEMA 4X

- **Panel Cut-out**
  - 5.4” x 5.4” (138 x 138 mm) full DIN

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