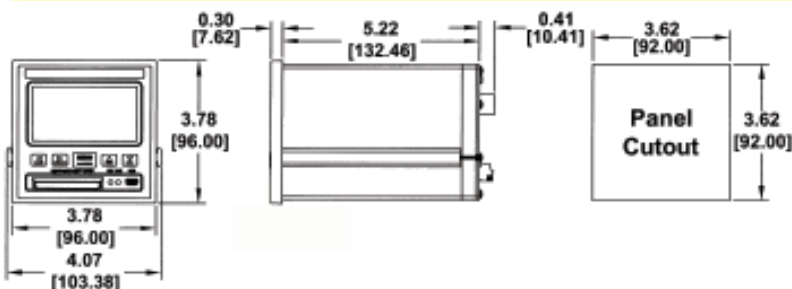


## DataChart 1250 Specifications

|                                                               |                                            |                                                                                                                                                                               |                             |                                                                                                                                                                                                                                                                                                                              |
|---------------------------------------------------------------|--------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Input Power:</b><br>on external<br><br>non-<br><br>trolled | <b>Standard:</b>                           | 9 Vdc +/- 0.5Vdc @ 5VA (depends external loads) provided by AC wall transformer (provided),                                                                                   | <b>Input Impedance:</b>     | >100k ohms                                                                                                                                                                                                                                                                                                                   |
|                                                               | <b>Option:</b>                             | isolated. 100-240Vac 50/60Hz Isolated 12-24 Vdc input power available (not compatible with internal battery pack option below).                                               | <b>Measurement Rate:</b>    | Up to 100 samples/sec per channel.                                                                                                                                                                                                                                                                                           |
|                                                               | <b>Option:</b>                             | Internal battery pack provides uninterrupted operation and controlled shutdown during blackout. 6Vdc, 2400mAH NiMH - Backup Time; 8 hours typical (depends on external load). | <b>Math Function:</b>       | $Y = mx + b$ ; average, hi peak, low peak.                                                                                                                                                                                                                                                                                   |
| <b>Output:</b><br>sensors.                                    |                                            | 2 outputs 5Vdc @ 50mA to power external                                                                                                                                       | <b>Media:</b>               | Compact Flash to 2 GB.                                                                                                                                                                                                                                                                                                       |
| <b>Number of Channels:</b>                                    | 2 universal, user selectable.              |                                                                                                                                                                               | <b>Display:</b>             | LCD Graphics, 160 x 80 pixels, black FSTN with white LED backlight. User controlled backlight level and contrast adjust (electronic).                                                                                                                                                                                        |
| <b>Isolation:</b>                                             | 300V AC/DC channel input to chassis ground |                                                                                                                                                                               | <b>Display Modes:</b>       | Trending (horizontal), Large dual digital readout, mixed mode.                                                                                                                                                                                                                                                               |
| <b>DC Input:</b>                                              | <b>Voltage</b>                             |                                                                                                                                                                               | <b>User Interface:</b>      | 5 button keypad (dual function buttons).                                                                                                                                                                                                                                                                                     |
|                                                               | <b>Ranges:</b>                             | 0-250mV; 0-1.25V; 0-2.5V; 0-5V; 0-12.5V; 0-25V                                                                                                                                | <b>Clock:</b>               | Auto leapyear and daylight savings adjustment. Internal battery back-up.                                                                                                                                                                                                                                                     |
|                                                               | <b>Accuracy:</b>                           | 0.1% of reading                                                                                                                                                               | <b>Relay Output:</b>        | Two alarm outputs: 30V 0.5A Form A relays                                                                                                                                                                                                                                                                                    |
| <b>Thermocouple:</b>                                          | <b>Resolution:</b>                         | 0.025% of full scale                                                                                                                                                          | <b>Opto-isolated Input:</b> | One input, 5 to 12Vdc activation @ 10mA typical.                                                                                                                                                                                                                                                                             |
|                                                               | <b>Current</b>                             |                                                                                                                                                                               | <b>Audible:</b>             | Internal beeper (multiple tones).                                                                                                                                                                                                                                                                                            |
|                                                               | <b>Ranges:</b>                             | 0-20mA; 4-20mA; 0-50mA; 10-50mA                                                                                                                                               | <b>Dimensions:</b>          | Front panel: 96mm x 96mm (1/4 DIN) x 152mm (3.78 x 3.78 x 6 inches).                                                                                                                                                                                                                                                         |
| <b>RTD:</b>                                                   | <b>Accuracy:</b>                           | 0.1% of reading excluding 250 ohm external shunt (required).                                                                                                                  | <b>Environmental:</b>       | <b>Indoor Use Only</b><br><b>Installation Category II</b> per IEC 664<br><b>Pollution Degree Level II</b> per IEC61010-1<br><b>Temperature:</b> -10°C to 50°C operating per IEC 61010-1<br><b>Humidity:</b> maximum relative humidity 80% for temperatures up to 31°C, decreasing linearly to 50% relative humidity at 40°C. |
|                                                               | <b>Resolution:</b>                         | 0.025% of full scale                                                                                                                                                          | <b>Electrical Safety:</b>   | Meets EN610610-1:2001, EC low voltage directive 72/23/EEC and 93/68/EEC. Power supply certified UL, cUL.                                                                                                                                                                                                                     |
|                                                               | <b>Accuracy:</b>                           | 0.3% of full scale (typical). Ambient Temperature Sensor Accuracy: ±1.5°C                                                                                                     | <b>Optional</b>             | <b>USB:</b> Front panel USB 2.0 slave port for data and remote real-time display when using Navigator software.<br><b>Ethernet:</b> Real time data display, historic data transfer, remote control and recorder configuration when using Navigator Software. Built in web server displays current measured values.           |
| <b>Frequency Input (Hz)/ Range:</b>                           | <b>Type</b>                                | <b>Range</b>                                                                                                                                                                  |                             |                                                                                                                                                                                                                                                                                                                              |
|                                                               | J                                          | -100 to 760°C ±2°C (-148 to 1400°F ±3°)                                                                                                                                       |                             |                                                                                                                                                                                                                                                                                                                              |
|                                                               | K <sup>1</sup>                             | -100 to 1000°C ±2°C (-148 to 1832°F ±3°)                                                                                                                                      |                             |                                                                                                                                                                                                                                                                                                                              |
| <b>Speed Input (RPM):</b>                                     | K <sup>2</sup>                             | 0 to 1370°C ±2°C (32 to 2498°F ±3°)                                                                                                                                           |                             |                                                                                                                                                                                                                                                                                                                              |
|                                                               | T                                          | -100 to 400°C ±2°C (-148 to 750°F ±3°)                                                                                                                                        |                             |                                                                                                                                                                                                                                                                                                                              |
|                                                               | E                                          | -80 to 400°C ±2°C (-112 to 750°F ±3°)                                                                                                                                         |                             |                                                                                                                                                                                                                                                                                                                              |
| <b>Accuracy:</b>                                              | <b>Resolution:</b>                         | 0.1°C                                                                                                                                                                         |                             |                                                                                                                                                                                                                                                                                                                              |
|                                                               | <b>Internal current source:</b>            | 1mA                                                                                                                                                                           |                             |                                                                                                                                                                                                                                                                                                                              |
|                                                               | <b>Type</b>                                | <b>Range</b>                                                                                                                                                                  |                             |                                                                                                                                                                                                                                                                                                                              |
| <b>Pulse width:</b>                                           | 100 Ohm Pt 385                             | -100 to 750°C (-148 to 1380°F)                                                                                                                                                |                             |                                                                                                                                                                                                                                                                                                                              |
|                                                               | 100 Ohm Pt 392                             | -100 to 750°C (-148 to 1380°F)                                                                                                                                                |                             |                                                                                                                                                                                                                                                                                                                              |
|                                                               | 2 or 3 wire.                               |                                                                                                                                                                               |                             |                                                                                                                                                                                                                                                                                                                              |
| <b>Frequency Input (Hz)/ Range:</b>                           | 0 - 10,000 Hz / 0 - 600,000 RPM            |                                                                                                                                                                               |                             |                                                                                                                                                                                                                                                                                                                              |
| <b>Speed Input (RPM):</b>                                     | <b>Accuracy:</b>                           | Freq: ±1 Hz; RPM: ±1 RPM below 9,999 RPM; ±10 RPM above 9,999 RPM                                                                                                             |                             |                                                                                                                                                                                                                                                                                                                              |
|                                                               | <b>Input:</b>                              | Low <1.0Vdc; High >3.0 <12.0Vdc                                                                                                                                               |                             |                                                                                                                                                                                                                                                                                                                              |
|                                                               | <b>Pulse width:</b>                        | 10 microsecond minimum.                                                                                                                                                       |                             |                                                                                                                                                                                                                                                                                                                              |

## DataChart 1250 Dimensions



Rear Panel