

## DataChart 1250 Specifications

**Input Power:** Standard: 9 Vdc +/- 0.5Vdc @ 5VA (depends on external loads) provided by external AC wall transformer (provided), non-isolated. 100-240Vac 50/60Hz  
 Option: Isolated 12-24 Vdc input power available (not compatible with internal battery pack option below).  
 Option: Internal battery pack provides uninterrupted operation and controlled shutdown during blackout. 6Vdc, 2400mAH NiMH - Backup Time; 8 hours typical (depends on external load).

**Output:** 2 outputs 5Vdc @ 50mA to power external sensors.

**Number of Channels:** 2 universal, user selectable.

**Isolation:** 300V AC/DC channel input to chassis ground

### DC Input:

**Voltage**  
**Ranges:** 0-250mV; 0-1.25V; 0-2.5V; 0-5V; 0-12.5V; 0-25V  
**Accuracy:** 0.1% of reading  
**Resolution:** 0.025% of full scale

**Current**  
**Ranges:** 0-20mA; 4-20mA; 0-50mA; 10-50mA  
**Accuracy:** 0.1% of reading excluding 250 ohm external shunt (required).  
**Resolution:** 0.025% of full scale

### Thermocouple:

**Accuracy:** 0.3% of full scale (typical). Ambient Temperature Sensor Accuracy: ±1.5°C  

Type	Range
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°)
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°)

### RTD:

**Accuracy:** 0.3% of full scale (typical).  
**Resolution:** 0.1°C  
**Internal current source:** 1mA  

Type	Range
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.

**Frequency Input (Hz)/ Range:** 0 - 10,000 Hz / 0 - 600,000 RPM  
**Speed Input (RPM): Accuracy:** Freq: ±1 Hz; RPM: ±1 RPM below 9,999 RPM; ±10 RPM above 9,999 RPM  
**Input:** Low <1.0Vdc; High >3.0 <12.0Vdc  
**Pulse width:** 10 microsecond minimum.

**Input Impedance:** >100k ohms

**Measurement Rate:** Up to 100 samples/sec per channel.

**Math Function:** Y = mx + b; average, hi peak, low peak.

**Media:** Compact Flash to 2 GB.

**Display:** LCD Graphics, 160 x 80 pixels, black FSTN with white LED backlight. User controlled backlight level and contrast adjust (electronic).

**Display Modes:** Trending (horizontal), Large dual digital readout, mixed mode.

**User Interface:** 5 button keypad (dual function buttons).

**Clock:** Auto leapyear and daylight savings adjustment. Internal battery back-up.

**Relay Output:** Two alarm outputs: 30V 0.5A Form A relays

**Opto-isolated Input:** One input, 5 to 12Vdc activation @ 10mA typical.

**Audible:** Internal beeper (multiple tones).

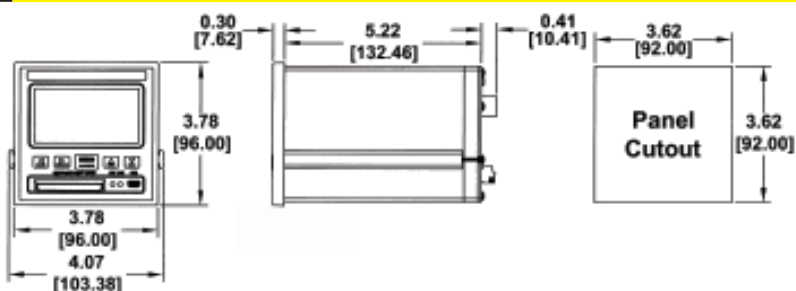
**Dimensions:** Front panel: 96mm x 96mm (1/4 DIN) x 152mm (3.78 x 3.78 x 6 inches).

**Environmental:** **Indoor Use Only**  
**Installation Category II** per IEC 664  
**Pollution Degree Level II** per IEC61010-1  
**Temperature:** -10°C to 50°C operating per IEC 61010-1  
**Humidity:** maximum relative humidity 80% for temperatures up to 31°C, decreasing linearly to 50% relative humidity at 40°C.

**Electrical Safety:** Meets EN610610-1:2001, EC low voltage directive 72/23/EEC and 93/68/EEC. Power supply certified UL, cUL.

**Optional**  
**USB:** Front panel USB 2.0 slave port for data and remote real-time display when using Navigator software.  
**Ethernet:** Real time data display, historic data transfer, remote control and recorder configuration when using Navigator Software. Built in web server displays current measured values.

## DataChart 1250 Dimensions



Rear Panel