



## MIC 1880™

### Process and AC/DC Volts & Current Metering

#### 1/8 DIN Process Meter with Alarm

#### DESCRIPTION

The Partlow brand MIC 1880 is a series of 1/8 DIN instruments which offer breakthrough display technology as well as easy-to-program user setup. Its large LED display features the ability to change color based on process status such as exceeding the count preset. Therefore, when monitoring critical values, the MIC 1880 panel meter provides operators with an instant visual alert to changes in the application's status.

Models with input characteristics for temperature, DC Process, and AC or DC Volts/Amps are available. These intelligent units offer multiple control & alarm outputs, optional serial communication, and specialized functions on analog input units. The front panel is rated NEMA 4X/IEC IP65 for use in washdown or dusty environments.

#### APPLICATIONS:

The Partlow MIC 1880 digital indicator is an easy-to-use, low cost solution for indication and display within industrial temperature and process measurement applications – providing high visibility and excellent accuracy in a compact size.

#### INDUSTRIES

- Industrial and lab ovens/furnaces
- Plastics and thermal forming
- Packaging applications
- And any other display of process measurement especially where visible notification an out-of-range alarm condition is a requirement

#### FEATURES/BENEFITS

- Large Red/Green Color Selection Display also may be set to change color at alarm condition.
- 1/8 DIN - NEMA 4X/IP65 Front Panel Sealing
- Thermocouple, Process, Voltage and Current Input
- Optional Serial Communications
- Relay, Open-Collector and Linear Outputs
- High or Low Alarm Conditions

PARTLOW™ brand

# MIC 1880™

## Process and AC/DC Volts & Current Metering

### 1/8 DIN Process Meter with Alarm

Indicators

#### SPECIFICATIONS\*

##### STANDARD FEATURES

4 per second input sample rate  
Universal input  
Simple 4 button operation, Large 4 digit 18mm high red or green display with color change on alarm possible  
Plug-in output modules – install just the function needed  
Multipoint scaling & Tare functions  
Jumperless input configuration  
Auto-detection of installed output modules  
Process alarms  
Rugged ABS Plastic housing

##### ENVIRONMENTAL CHARACTERISTICS

**Operating Temperature:** 0° to 55° Celsius, 32° to 131° Fahrenheit  
**Storage Temperature:** -20° to 80° Celsius, -4° to 176° Fahrenheit  
**Relative Humidity:** 20% to 95% non-condensing

##### ELECTRICAL

**Supply Voltage:** 90-264 VAC, 50/60 Hz, or 20-50 VAC/VDC  
**Power Consumption:** 5 Watts

##### DISPLAY:

**Type:** Red/Green, 7 segment LED, 5 digit primary display, single digit secondary display  
**Height:** 0.71" (18mm) primary display, 0.3" (7mm) secondary display  
**Annunciators:** Output 1 & 2 status

##### CONTROL INPUTS:

**Type:** Sinking, Edge Sensitive  
**Logic:** Low  $\leq$  2.0 VDC, High  $\geq$  3.0  
**Response Time:** 25 ms  
**Impedance:** 4.7 k $\Omega$  to +Voltage  
**Function:** Programmable

##### SENSOR/PROCESS INPUTS:

**Temperature:** B, J, K, N, S, & T thermocouples, 3 & 4 wire RTDs  
**DC Process:** to 50 mA,  $\pm$ 10Volts DC,  $\pm$ 100 mV  
**AC Volts/Amps:** from 0-1 VAC to 0-600 VAC, 0-1 mA to 0-1 amp  
**DC Volts/Amps:** from 0-100 mV to 0-600 VDC, 0-1 mA to 0-2 amps

##### OUTPUTS

**Solid State:** NPN open collector, 30 VDC max., 100 mA max.  
**Relay:** SPDT, 5A resistive @110 VAC  
**Latency:** 75  $\mu$  seconds, plus 8 ms for relay pull-in  
**Linear Outputs:** 0-20mA, 4-20mA, 0-10V, 2-10V, 0-5V, 1-5V (field selectable)  
**Accessory Power Supply:** 24VDC nominal; 30mA max.

##### OUTPUT FUNCTIONS

**Alarm Modes (Alarm 1 and 2):** High/Low

##### ELECTRICAL PERFORMANCE

**Accuracy:**  $\pm$ 0.1% of span ( $\pm$ 0.01% of span for DC Process)

##### COMMUNICATIONS INTERFACE

**Interface:** RS-485; West ASCII  
**Baud Rate** selectable from 9600, 4800, 2400, or 1200  
**Maximum Zones:** 99

##### RATINGS/AGENCY APPROVALS

**Conformance:** UL, CUL, CE

##### PROTECTION

IEC IP65 (NEMA 4X) front panel

##### PHYSICAL DIMENSIONS

**Panel Cutout:** 1.77" x 3.62" (45mm x 92mm)  
**Width:** 3.78" (96mm)  
**Height:** 1.89" (48mm)  
**Depth:** 3.93" (100mm)  
**Weight:** 9 oz. (254g)  
**Mounting:** Panel Mount (bracket supplied)

##### WARRANTY

1 Year

\* Specifications are for base models with standard features only unless otherwise noted. Specifications subject to change without notice in accordance with our DBS policy of continuous improvement. All product and brand names are trademarks of their respective owners. All rights reserved.

Partlow™ brand and MIC 1880™ are trademarks of Danaher Industrial Controls Group. All rights reserved.

© 2005 DICG Corp.

Partlow Brand MIC 1880 Data Sheet (7/05)



Customer Service +1 800.390.6405  
Technical Support +1 800.866.6659  
[www.partlow.com](http://www.partlow.com) • [www.danaherindustrialcontrols.com](http://www.danaherindustrialcontrols.com)

**PARTLOW™ brand**

# MIC 1880™

**Process and AC/DC  
Volts & Current Metering**

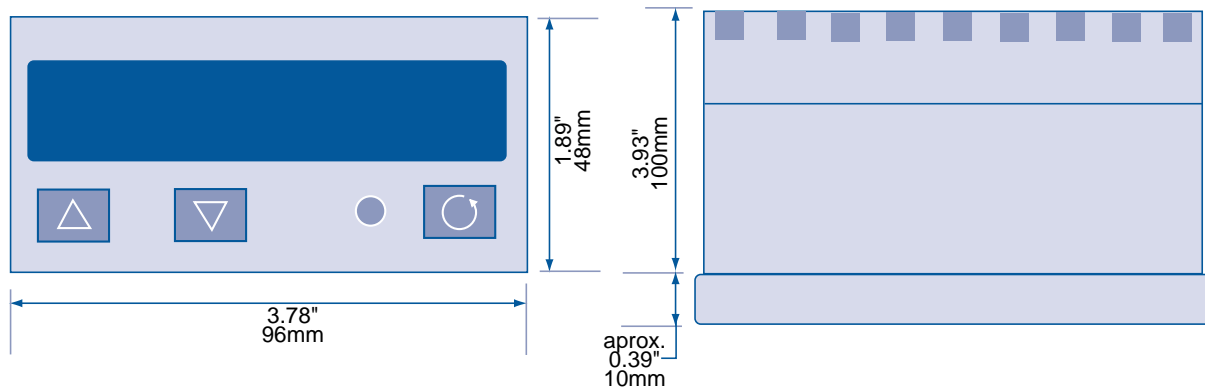
**Indicators**

**1/8 DIN Process Meter with Alarm**

## MODELS

Code 1: Model #	Code 2: Function	Code 3: 2nd Relay Option	Code 4: Linear Output Option	Code 5: Serial Communication Option	Code 6: Power Supply
<b>1880</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1/8 DIN Analog Input Process Indicator with Alarms	<b>1</b> Temperature <ul style="list-style-type: none"> <li>• Thermocouple</li> <li>• RTD</li> </ul> <b>2</b> DC Process <ul style="list-style-type: none"> <li>• 0 to 50mA</li> <li>• ± 10 Volts DC</li> <li>• ± 100mV</li> </ul> <b>3</b> AC Volts/Amps <b>5</b> DC Volts/Amps	<b>0</b> None <b>1</b> 2nd Relay	<b>0</b> None <b>3</b> Linear Output	<b>0</b> Not fitted <b>5</b> RS-485 Serial Comms <b>6</b> Digital Input Option	<b>0</b> 90-264 VAC <b>2</b> 20-50 VAC/VDC

## DIMENSIONS - 1/8 DIN



\* Specifications are for base models with standard features only unless otherwise noted. Specifications subject to change without notice in accordance with our DBS policy of continuous improvement. All product and brand names are trademarks of their respective owners. All rights reserved.

Partlow™ brand and 1880+™ are trademarks of Danaher Industrial Controls Group. All rights reserved.

© 2005 DICG Corp.

Partlow Brand 1880+ Data Sheet (7/05)

**Headquarters:** 1675 Delany Road • Gurnee, IL 60031-1282 • USA  
 Phone: +1 847.662.2666 • Fax: +1 847.662.6633

**Satellite Locations:**

**North America:** North Carolina, South Carolina, Connecticut, Massachusetts, New York, Canada, British Virgin Islands • **Europe:** United Kingdom, Italy, France, Germany, Spain, Slovakia • **Latin America:** Brazil • **Asia:** China, Japan, Korea, Singapore

**Customer Service:**  
 Tel.: +1.800.390.6405  
 Fax: +1.910.879.5486  
 partlow.custserv@dancon.com

**Technical Support**  
 Tel.: +1.800.866.6659  
 Fax: +1.847.782.5277

partlow.techsupport@dancon.com



[www.partlow.com](http://www.partlow.com) • [www.danaherindustrialcontrols.com](http://www.danaherindustrialcontrols.com)

Process Automation Worldwide Brands: LFE™ • Partlow™ • PMA™ • Rustrak™ • West™

*Process Automation Worldwide Brands:*

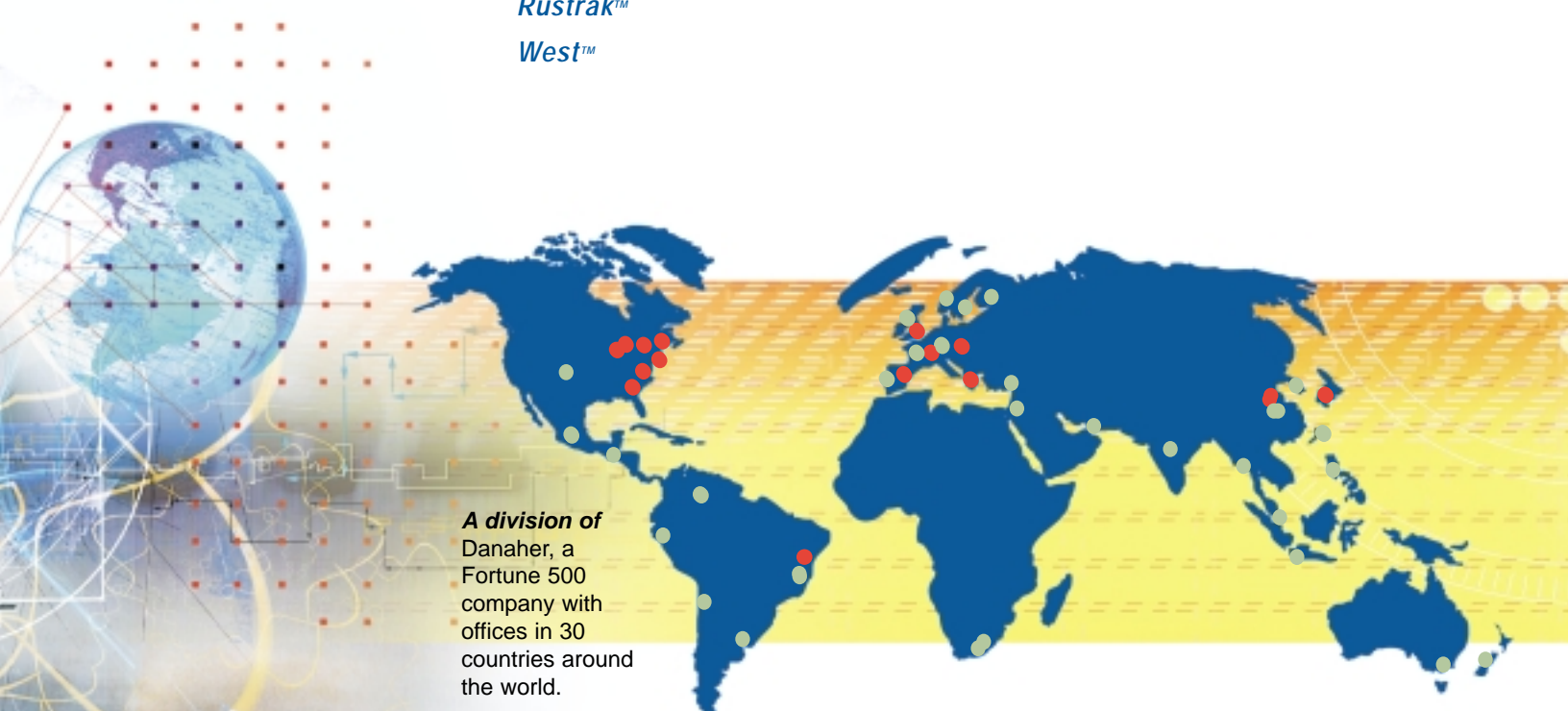
*LFE™*

*Partlow™*

*PMA™*

*Rustrak™*

*West™*



**A division of**  
Danaher, a  
Fortune 500  
company with  
offices in 30  
countries around  
the world.

**More Available.** With factories around the world, global sales and applications support, and an expansive network of distributors, we stay close to our customers - shortening lead times and fostering responsiveness. Three-day lead time is standard, with same-day shipments available on many of our products.

**More Selection.** We have a broad selection of controllers to meet application requirements in a variety of industries. User-configurable, accurate and flexible, with low, mid, or high level performance ranges, our controller products meet your system and budgetary requirements.

**More Reliable.** Our experience with more than 25,000 customers has taught us to design controllers that are reliable and durable, with quality standards that meet six sigma requirements.

For additional information or a full-line catalog, contact DICG Customer Service or visit our web site.

\* Specifications are for base models with standard features only unless otherwise noted. Specifications subject to change without notice in accordance with our DBS policy of continuous improvement. All product and brand names are trademarks of their respective owners. All rights reserved.

Partlow™ brand and MIC 1880™ are trademarks of Danaher Industrial Controls Group. All rights reserved.

© 2005 DICG Corp.

MIC 1880 Data Sheet (7/05)



**Headquarters:** 1675 Delany Road • Gurnee, IL 60031-1282 • USA  
Phone: +1 847.662.2666 • Fax: +1 847.662.6633

**Satellite Locations:**

**North America:** North Carolina, South Carolina, Connecticut, Massachusetts, New York, Canada, British Virgin Islands • **Europe:** United Kingdom, Italy, France, Germany, Spain, Slovakia • **Latin America:** Brazil • **Asia:** China, Japan, Korea, Singapore

**Customer Service:**

Tel.: +1.800.390.6405  
Fax: +1.910.879.5486  
partlow.custserv@dancon.com

**Technical Support**

Tel.: +1.800.866.6659  
Fax: +1.847.782.5277  
partlow.techsupport@dancon.com

[www.partlow.com](http://www.partlow.com) • [www.danaherindustrialcontrols.com](http://www.danaherindustrialcontrols.com)