**ORDERING INFO**

- **NEG** RED
  - Regulated 120V AC to 12V DC Power Supply
  - 3½ digits with high-contrast LCD
  - 200mV
- **NEG** GREEN
  - Regulated 120V AC to 5V DC Power Supply
  - 2V
- **NEG** RED
  - 200mV
- **NEG** GREEN
  - 2V
  - Space-saving design: only 1” (25 mm) deep
  - Low power: choice of 180µA (9V, ±5V) or 2.5mA (+5V)
- Optional RED or GREEN backlighting
- Optional loop powered 4-20mA process inputs available (DK590)
  - 2V
- Low-cost, high-performance replacement for many OEM DPMs
  - USA

**SPECIFICATIONS**

- **DISPLAY**
  - **Digits:** 3 ½ digits (±1999 counts)
  - **Type:** 0.5” (12mm) high-contrast reflective LCD
  - **Backlighting:**
    - Optional Red Negative
    - Optional Green Negative
      - (red numbers/black background)
    - Optional Green Positive
      - (black numbers/green background)
  - **Polarity:** automatic, "-" displayed
  - **Decimal Points:** 3 position, user-selectable
  - **Overrange:** three lower order digits blank for inputs >1999 & < -1999
    - available OEM option, contact factory

- **INPUTS**
  - **Ranges:** ±200.0 mV, ±2.000 V, ±20.00 VDC
  - **Configuration:** bipolar & differential
  - **Protection:** ±350 VDC, (+100 VDC on 200 mV range)
  - **Impedance:** >10 MΩ, (>1 MΩ on 20 V range)

- **PERFORMANCE**
  - **Accuracy:** ±(0.1% +1 count) typical
  - ±(0.1% + 2 counts) maximum
  - **Conversion Rate:** 2.5 per second
  - **Normal Mode Rejection:** >30 dB @ 60 Hz
  - **Common Mode Range:** ±1 VDC
  - **Common Mode Rej.:** >86 dB
  - **Zero Adjustment:** automatic
  - **Warmup:** 10 minutes typical
  - **Temperature Coeff.:** ±100 ppm per °C typical

- **ENVIRONMENT**
  - **Operating Range:** 0 to 50 °C
  - **Storage Range:** -10 to 70 °C

- **POWER SUPPLY**
  - 5V powered:
    - +5 VDC (±5%) at 2.5 mA
  - 9V(±5V) powered:
    - +7.2 to +12 V at 180 µA
    - +5 VDC at 100 mA typical
  - **MOUNTING**
    - surface or window mount
  - **CONNECTION**
    - 13 pins, 0.025” square on 0.1” centers - pin 3 missing

**FEATURES**

- Low-cost, high-performance replacement for many OEM DPMs
- Optional RED or GREEN backlighting
- Mounting choices:
  - Window mount for custom OEM
  - Surface mount with minimum space behind the panel
- Low power: choice of 180µA (9V, ±5V) or 2.5mA (+5V)
- Space-saving design: only 1” (25 mm) deep
- Occupies less than 2.5 X 1.1 inches of front panel space
- 3½ digits with high-contrast LCD
- Optional loop powered 4-20mA process inputs available (DK590)

**ACCESSORIES**

- Calibrator: NONE
- 5VDC

**PART NUMBER**

<table>
<thead>
<tr>
<th>PART NUMBER</th>
<th>BACKLIGHT COLOR</th>
<th>METER INPUT</th>
<th>METER POWER</th>
<th>BACKLIGHT POWER</th>
</tr>
</thead>
<tbody>
<tr>
<td>DK101</td>
<td>NO BACKLIGHT</td>
<td>200mV</td>
<td>9V</td>
<td>NONE</td>
</tr>
<tr>
<td>DK102</td>
<td>NO BACKLIGHT</td>
<td>2V</td>
<td>9V</td>
<td>NONE</td>
</tr>
<tr>
<td>DK103</td>
<td>NO BACKLIGHT</td>
<td>20V</td>
<td>9V</td>
<td>NONE</td>
</tr>
<tr>
<td>DK301</td>
<td>NO BACKLIGHT</td>
<td>200mV</td>
<td>5V</td>
<td>NONE</td>
</tr>
<tr>
<td>DK302</td>
<td>NO BACKLIGHT</td>
<td>2V</td>
<td>5V</td>
<td>NONE</td>
</tr>
<tr>
<td>DK303</td>
<td>NO BACKLIGHT</td>
<td>20mV</td>
<td>5V</td>
<td>NONE</td>
</tr>
<tr>
<td>DK311</td>
<td>POS GREEN</td>
<td>200mV</td>
<td>9V</td>
<td>5VDC</td>
</tr>
<tr>
<td>DK312</td>
<td>POS GREEN</td>
<td>2V</td>
<td>9V</td>
<td>5VDC</td>
</tr>
<tr>
<td>DK331</td>
<td>POS GREEN</td>
<td>200mV</td>
<td>5V</td>
<td>5VDC</td>
</tr>
<tr>
<td>DK332</td>
<td>POS GREEN</td>
<td>2V</td>
<td>5V</td>
<td>5VDC</td>
</tr>
<tr>
<td>DK411</td>
<td>NEG GREEN</td>
<td>200mV</td>
<td>9V</td>
<td>5VDC</td>
</tr>
<tr>
<td>DK412</td>
<td>NEG GREEN</td>
<td>2V</td>
<td>9V</td>
<td>5VDC</td>
</tr>
<tr>
<td>DK431</td>
<td>NEG GREEN</td>
<td>200mV</td>
<td>5V</td>
<td>5VDC</td>
</tr>
<tr>
<td>DK432</td>
<td>NEG GREEN</td>
<td>2V</td>
<td>5V</td>
<td>5VDC</td>
</tr>
<tr>
<td>DK511</td>
<td>NEG RED</td>
<td>200mV</td>
<td>9V</td>
<td>5VDC</td>
</tr>
<tr>
<td>DK512</td>
<td>NEG RED</td>
<td>2V</td>
<td>9V</td>
<td>5VDC</td>
</tr>
<tr>
<td>DK531</td>
<td>NEG RED</td>
<td>200mV</td>
<td>5V</td>
<td>5VDC</td>
</tr>
<tr>
<td>DK532</td>
<td>NEG RED</td>
<td>2V</td>
<td>5V</td>
<td>5VDC</td>
</tr>
</tbody>
</table>

**ACCESSORIES**

- J1C4............................................. 4 Pin Connector / Wire Assembly
- J1C13......................................... 13 Pin Connector / Wire Assembly
- PW2-5................................. Regulated 120V AC to 5V DC Power Supply
- PW2-12................................. Regulated 120V AC to 12V DC Power Supply
- CVC........................................... Calibrator
Specifications Installation and Operating Instructions

LCM Digital Panel Meters
Low Cost 3½ Digit LCD Display

DK100/300

WINDOW/SURFACE MOUNT DIMENSIONS

WIRING CONNECTIONS

PIN # PIN NAME DESCRIPTION
1  V+  POSITIVE SUPPLY CONNECTION
2  V-  NEGATIVE SUPPLY CONNECTION
3  NC  NO PIN
4  GND  NEG PWR FOR +5V DPMS
5  COM  ANALOG COMMON
6  INLO  DISPLAY INPUTS: DISPLAY IS NEGATIVE
7  INHI  IF INHI IS LOWER THAN INLO
8  RFL (CLK) NEGATIVE REFERENCE INPUT (AND OPTIONAL HOLD)
9  RFH  POSITIVE REFERENCE INPUT
10  RDH  INTERNAL REFERENCE OUTPUT
11  D3  DECIMAL POINT = 1XX.X*
12  D2  DECIMAL POINT = 1X.XX*
13  D1  DECIMAL POINT = 1.XXX*

*CONNECT TO PIN 1

C-TON INDUSTRIES • PO Box 11746 • Memphis, TN 38111 • USA (603) 471-0158 • EMAIL: INFO@CTONINDUSTRIES.COM