

DMS-3019X Series

Alternate Source for DP-650 Series, 3½ Digit



Discontinued

FEATURES

- Replaces DP-650, DP-652 and DP-654 meters
- Connects directly to existing wiring
- ±2V input range
- Low power consumption
- Wider operating temperature range (0 to +60°C)
- Rugged, epoxy-encapsulated plastic packages
- Large (0.4"/10.2mm) LCD displays

ORDERING INFORMATION

DMS-30194 ±2V input

 DMS-30193
 ±200mV input (Obsolete)

 DMS-30195
 ±20V input (Obsolete)

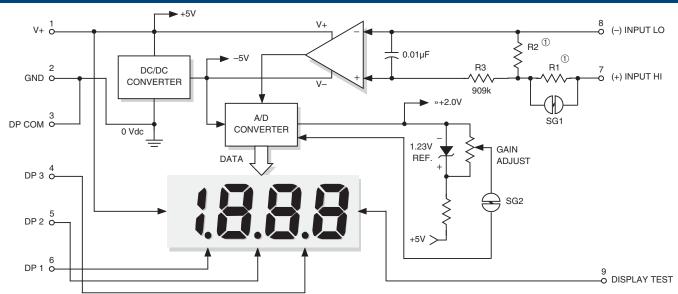
DMS-BZL1 Bezel assembly
DMS-BZL2 Bezel with gasket
DMS-30-CP Panel cutout punch

Murata Power Solutions' DMS-3019X Series, 3½ Digit, LCD Display, Digital Panel Voltmeters provide DP-650 users with a superior-quality alternate source. The DMS-3019X Series input/output connector is pin-compatible with nearly all DP-650 applications. Only minor sheetmetal modifications are needed to attain all the advantages offered by the DMS-3019X Series digital voltmeters.

Provisions are also included for the addition of custom input-scaling resistors—a feature found only on DMS-3019X meters. Autozero calibration, autopolarity changeover and a factory-calibrated ultra-stable reference circuit are standard. A reliable, epoxyencapsulated DMS-30LCD digital voltmeter, with large (0.4"/10.2mm) LCD digits, is used in all three models. All internal and external connections are 100% soldered—no elastomeric connectors are used.

The DMS-3019X Series offers many noteworthy improvements over its competitors: wider operating temperature range, lower power consumption and higher input impedance, to name a few. And, most importantly, all Murata Power Solutions digital panel meters are designed and manufactured in the USA!

SIMPLIFIED SCHEMATIC DIAGRAM



① R1 and R2 are user supplied





Figure 1. DMS-3019X Simplified Schematic

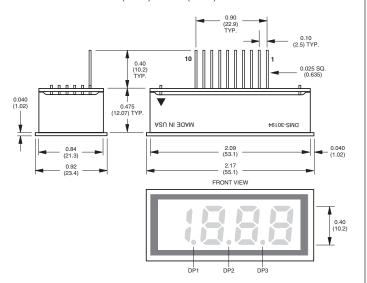


DMS-3019X Series

Alternate Source for DP-650 Series, 3½ Digit LCD Display Digital Panel Voltmeters

MECHANICAL SPECIFICATIONS

TOLERANCES: 2 PL DEC ± 0.02 (± 0.51) 3 PL DEC ± 0.010 (± 0.254) LEAD DIMENSIONS: 0.025 (0.635) x 0.025 (0.635) NOMINAL



ELECTRICAL SPECIFICATIONS

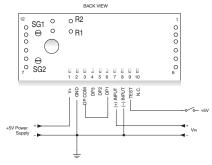
Typical at $TA = +25^{\circ}C$ and supply voltage = +5V. (See DMS-30LCD data sheet for more information.)

Power Supply (V+ to GND)
Full Scale Input
Input Impedance
Sampling Rate
Accuracy (VIN = +0.190V)
Display Type
Operating Temperature
Storage Temperature

+5Vdc, ±5% @ 1.2mA max. See Ordering Information 1 Megohm 3 Samples per second

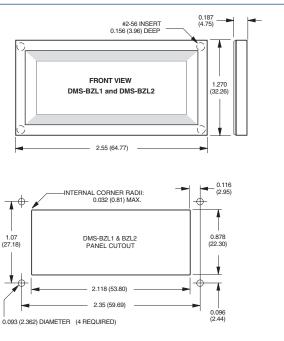
±2 Counts max. (±0.1%)
3½ Digit LCD, 0.40"/10.2mm high
0 to +60°C
-20 to +75°C

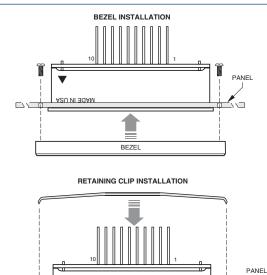
Humidity (Non-condensing) 0-95%



Typical Single-ended Connections

BEZEL INSTALLATION AND RECOMMENDED DRILL AND PANEL CUTOUT





A panel-mount retaining clip is supplied with all models

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This product is subject to the following operating requirements and the Life and Safety Critical Application Sales Policy:

Refer to: http://www.murata-ps.com/requirements/

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