



FEATURES

OBSOLETE PRODUCT

- Replaces DP-650, DP-652 and DP-653 meters
- Connects directly to existing wiring
- Compact design

Contact Factory for Replacement Model

- Low power consumption

- Wider operating temperature range (0 to +60 °C)
- Rugged, epoxy-encapsulated plastic packages
- Large (0.47/10.2mm) 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

DATEL's 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 (0.47/10.2mm) 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 DATEL digital panel meters are designed and manufactured in the USA!

SIMPLIFIED SCHEMATIC DIAGRAM

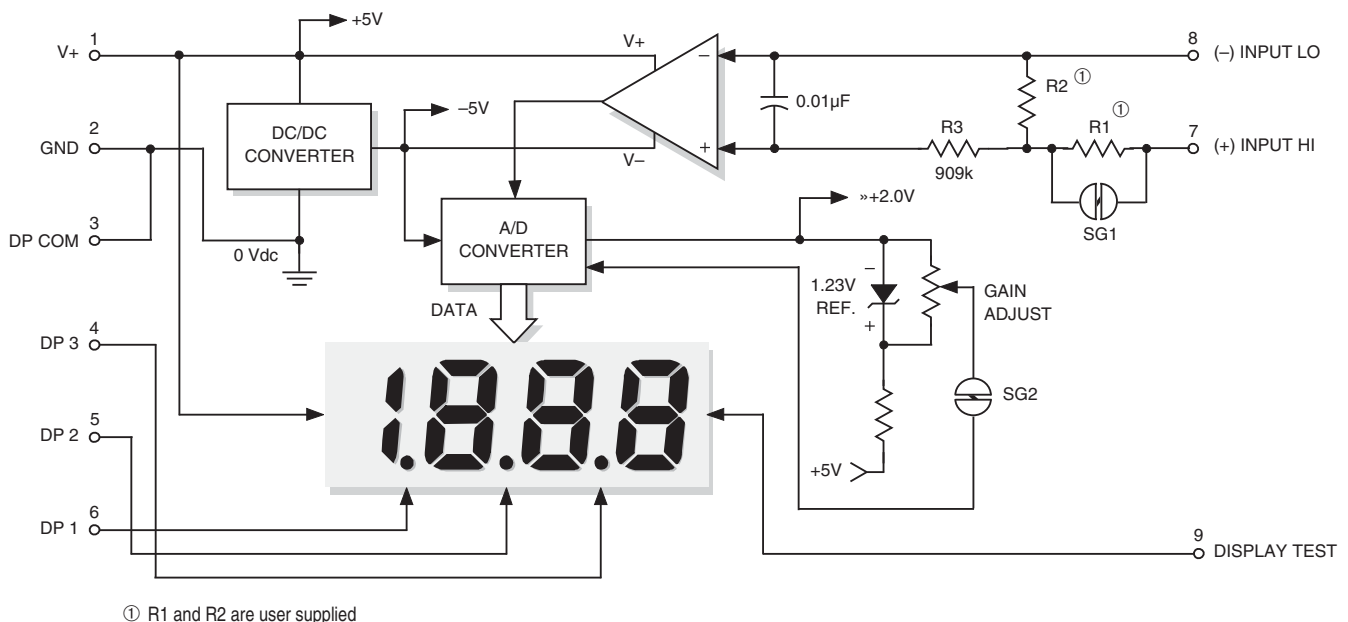
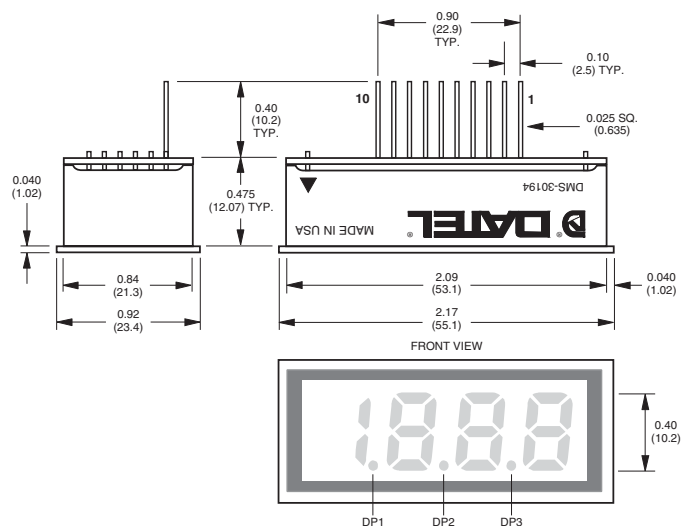


Figure 1. DMS-3019X Simplified Schematic



MECHANICAL SPECIFICATIONS

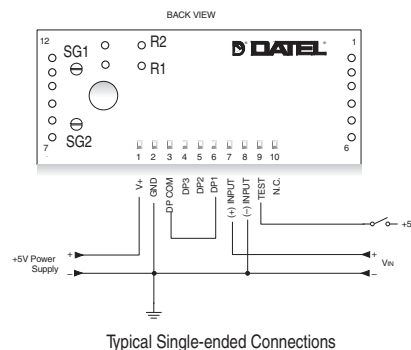
TOLERANCES: 2 PL DEC ± 0.02 (± 0.51) 3 PL DEC ± 0.010 (± 0.254)
LEAD DIMENSIONS: 0.025 (0.635) x 0.025 (0.635) NOMINAL



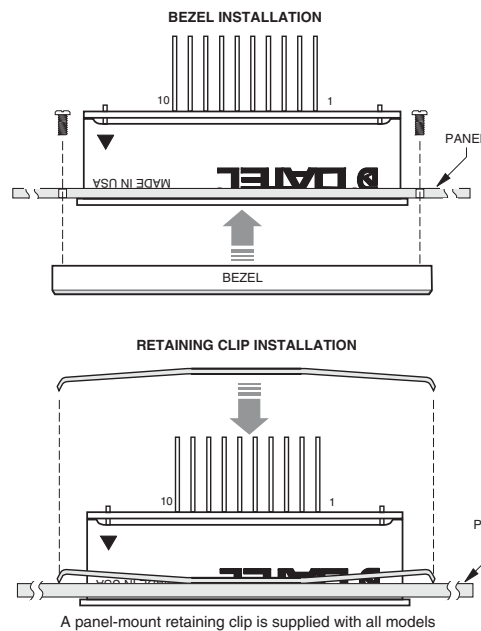
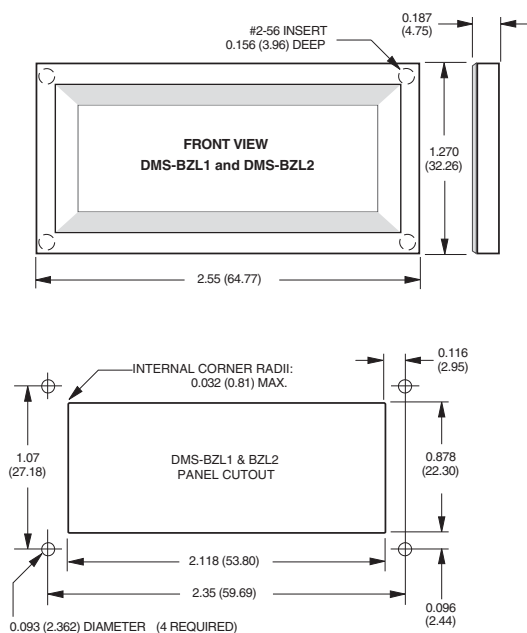
ELECTRICAL SPECIFICATIONS

Typical at TA = +25°C and supply voltage = +5V.
(See DMS-30LCD data sheet for more information.)

Power Supply (V+ to GND)	+5Vdc, $\pm 5\%$ @ 1.2mA max.
Full Scale Input	See Ordering Information
Input Impedance	1 Megohm
Sampling Rate	3 Samples per second
Accuracy ($V_{IN} = +0.190V$)	± 2 Counts max. ($\pm 0.1\%$)
Display Type	3½ Digit LCD, 0.40"/10.2mm high
Operating Temperature	0 to +60°C
Storage Temperature	-20 to +75°C
Humidity (Non-condensing)	0-95%



BEZEL INSTALLATION AND RECOMMENDED DRILL AND PANEL CUTOUT



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