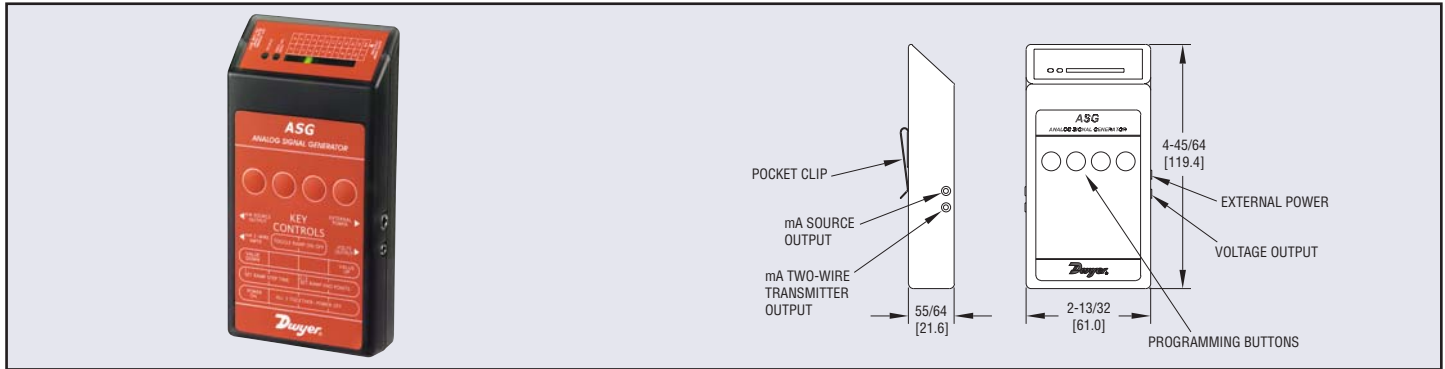




Model  
ASG

# Analog Signal Generator

Ramp Function, Bar Graph LED, Selectable Auto Shut Off



The pocket size model ASG Analog Signal Generator is an ideal tool for troubleshooting transmitters, transducers, motors and actuators. The unit generates a 0 to 10 VDC signal in increments of 1 volt or a 4 to 20 mA signal in increments of 2 mA. An LED bar graph visually indicates analog signal level. The model ASG will also continuously ramp to user defined maximum and minimum values with user defined ramp interval timing. Units are furnished with 6 ft (1.8 m) leads with alligator clips, 120 VAC plug in adapter protective carrying case and instruction manual.

## SPECIFICATIONS

**Impedance:** Voltage: 1000K min. Current: 300K max.  
**Output:** 0 to 20 mA (2 mA increments).  
0-10 VDC (1 VDC increments).  
**Resolution:** 2 mA (current). 1 VDC (voltage).  
**Ramping Time Intervals:** 2 to 20 sec (2 sec increments).  
**Ambient Operating Temperature:** 32 to 122°F (0 to 50°C).  
**Power Requirements:** 9-Volt battery or 120 VAC (provided).  
**Auto Shutoff Times:** 2 to 20 min. (2 min. increments)  
(6 minute default).  
**Electrical Connections:** 6 ft (1.8 m) with alligator clips.  
**Weight:** 3.2 oz (without battery).  
**Agency Approvals:** CE.

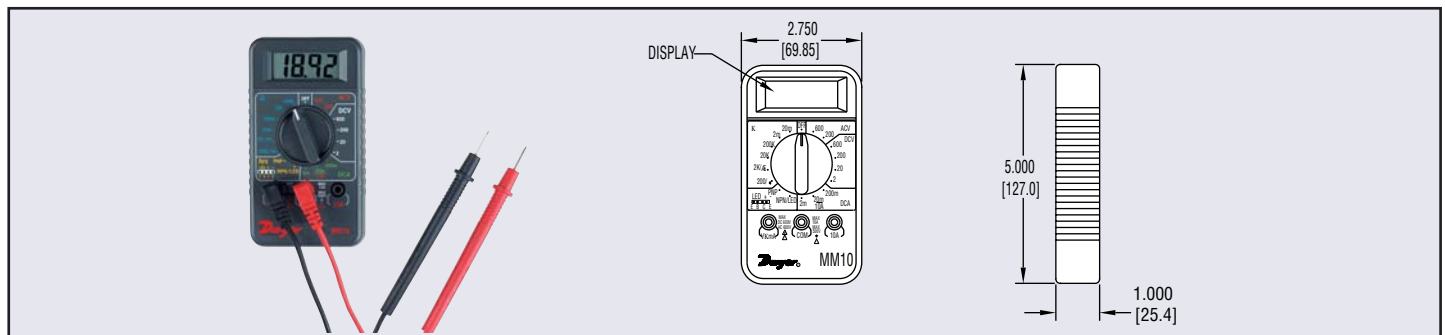
Model ASG Analog Signal Generator



Model  
MM10

# Digital Multimeter

Measures DC /AC Voltage, DC Current and Resistance, Overload Protection



Our compact, low cost Model MM10 Digital Multimeter is ideal for general electrical testing and troubleshooting. This full function multimeter measures DC and AC voltage to 600V, DC current to 10A and resistance to 20MΩ. In addition to volts, amps and ohms, this meter includes audible continuity, diode, LED and transistor hFE tests. The 3-1/2 digit LCD features automatic polarity correction, low battery and overload indication. Rugged, high impact case comes equipped with built-in tilt-stand for versatile, hands-free operation. Overload protected to 600VAC/600VDC for voltage ranges and to 500VAC/500VDC for resistance, diode and continuity test ranges. Current ranges are protected by 0.5A/250V, replaceable fuse. Multimeter is furnished with 22" test leads, 9V battery and instruction manual.

## SPECIFICATIONS

**DC VOLTAGE**  
**Ranges:** 2V, 20V, 200V, 600V.  
**Resolution:** 1 mV, 10 mV, 100 mV, 1V.  
**Accuracy:** 2V: ±(0.5% + 1 digit); 20 to 600V: ±(1.5% + 1 digit).  
**AC VOLTAGE**  
**Ranges:** 200V, 600V.  
**Resolution:** 100mV, 1V.  
**Accuracy:** 200V: ±(2% + 3 digits); 600V: ±(2.5% + 3 digits).  
**RESISTANCE**  
**Ranges:** 200K, 2kK, 20kK, 200kK, 2MK, 20MK.  
**Accuracy:** 200K: ±(2% + 2 digits); 2kK to 2MK: ±(1.5% + 2 digits); 20MK: ±(2.5% + 2 digits).  
**DC CURRENT**  
**Ranges:** 2 mA, 20 mA, 200 mA, 10A.  
**Resolution:** 1µA, 10µA, 100µA, 10 mA.  
**Accuracy:** 2 to 200 mA: ±(1.5% + 1 digit); 10A: ±(2% + 1 digit).

**CONTINUITY TEST**  
**Range:** < 30K. **Resolution:** 0.1K.  
**DIODE TEST**  
**Resolution:** 1 mV.  
**Test Current:** 1 mA.  
**TRANSISTOR (hFE) TEST**  
**Type:** NPN, PNP.  
**Range:** 0-1000.  
**LED TEST**  
**Test Voltage:** < 3V.  
**Range:** 1.5 - 3V.  
**GENERAL**  
**Display:** 3-1/2 digit LCD with a maximum reading of 1999.  
**Sampling Rate:** 2.5 times per second.  
**Ambient Operating Temperature:** 32 to 104°F (0 to 40°C), 0 to 80% RH;  
**Storage Temperature:** 14 to 140°F (-10 to 60°C), 0 to 80% RH.  
**Power Requirements:** One 9V battery.  
**Battery Life:** 150 hrs. approx.  
**Weight:** 5.2 oz (150 g).  
**Agency Approvals:** CE.

Model MM10 Digital Multimeter