

**Designed as an inexpensive solution for static mechanical testing**

**where a digital display is required.**



Model DSC-DD signal conditioner

The DSC-DD is a digital signal conditioner with analog output. All calibration is handled by software via an RS232 connection. The sampling rate is well suited for typical tensile and compression tests. They provide all the signal conditioning electronics needed for a strain gage based extensometer. The DSC-DD has an excitation

voltage of 5 VDC and a high accuracy amplifier to provide high level DC voltage output. The unit includes a tare button to zero output at the start of every test and a shunt button for periodic verification of the output.

The output is well suited for direct connection to data acquisition boards which require a high level DC input voltage. It will also connect directly to chart recorders or test controllers. For computer based controls, it allows the extensometer data to be acquired by the data acquisition software.

All models include a power cord for your country. An 8 ft (2.5m) output cable is included to connect to external systems. Calibration with an extensometer is included in the pricing.

#### **SPECIFICATIONS**

- Automatic recognition of up to 3 extensometers after initial set-up
- Multiple extensometers may be calibrated with one DSC
- 6 digit display in engineering units such as percent strain or displacement
- Accuracy: 0.01% of full scale  $\pm 1$  digital count
- Analog output with capability of 0 to  $\pm 10$  VDC output
- Operating temperature range: 0 to 50°C
- Front panel tare button to zero output at the start of every test
- 60 readings per second update rate
- Includes power cord, connector for extensometer(s), output cable and calibration with extensometer
- Input power: 110 VAC, 60 Hz, Optional 240 VAC, 50 Hz



Model DSC-DD rear panel



Model DSC-DD signal conditioner

**Designed for general purpose testing, these conditioners are**

**available with one or two channels, and can be used as full system**

**replacements for older test systems. This provides a low cost way to**

**obtain the data for stress-strain plots. The automatic recognition**

**feature allows multiple extensometers to be calibrated individually**

**on one meter.**



Model DSM-Plus high accuracy digital strain meter

The DSM-Plus is ideal for customers who own several extensometers. When a configured extensometer is plugged in, the meter automatically recognizes it. It is also possible to calibrate the same extensometer in multiple ranges. For example, it is frequently convenient to calibrate an extensometer to a range of 10% of the full

scale measuring range to allow greater sensitivity for tests at small strains.

The dual channel version is very useful for tests which require two strain readings, such as measurement of Poisson's ratio or r-value tests on sheet metal samples. It also is a low cost solution to upgrading older test systems. One channel is used for strain and the other for the force reading from a load cell. The RS232 digital output or the analog outputs make computerized data acquisition simple.

#### **SPECIFICATIONS**

- Automatic recognition of up to 20 extensometers after initial set-up
- Accuracy: 0.01% of full scale  $\pm 1$  digital count
- 6 digit display in engineering units such as percent strain or displacement
- Analog output with capability of 0 to  $\pm 10$  VDC output
- Common mode rejection: 115dB
- Operating temperature range: 0 to 50 °C
- Front panel tare button to zero output at the start of every test
- 60 readings per second update rate
- Includes power cord, connector for extensometer(s), output cable and calibration with extensometer
- Input power: 110 VAC, 60 Hz, Optional 220 VAC, 50 Hz
- Optional second channel allows for second extensometer to be used simultaneously or load and strain to be measured simultaneously for a low cost solution to obtaining stress-strain plots for older machines

**Model DSM-Plus Available Options:**  
Second channel for strain or load cell



Model DSM-Plus two channel high accuracy strain meter with Model 3542

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