



# TEST SYSTEMS INTERNATIONAL, INC.

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## NDT INSPECTION INSTRUMENTS

### AT-23 CURRENT AND SHOT DURATION DPM



AT-23 current meter and shot duration time meters are for installation on new or old mag particle equipment to provide the most up to date accuracy of output amperes and shot duration with infinite hold, auto reset and update functions that will meet or exceed all industrial and military requirements.

High visibility LED digital panel meters display the output current in amperes and the duration of output current flow (shot time) in seconds. Meters hold this reading indefinitely for accurate recording of each shot. As each shot is taken the meter will automatically reset, compute and display the new readings in less than a second.

Standard meters are mean average FWDC calibrated for operation from your existing 50mv/1000 Amp Meter shunt either in place of or in conjunction with your machines meter. Meters are preset but final calibration depends on accuracy of your existing meter shunt. An externally accessible adjustment is available for final calibration. They may be ordered for AC or HWDC equipment and different meter shunt ratings. AC/DC True RMS meter is also available. Note specifications of full range of options.

Complete with durable die cast case, mounting hardware for panel or surface mount, meter leads and AC power cord.

#### SPECIFICATIONS:

##### A. Current Meter

1. \*Basic Accuracy = 1 %  $\pm$  2 digits 0-2kHz CF2 mean average
2. Range = 200 to 19,999 amperes (0.20 to 19.99 x 1000 A)
3. DPM Display = 3 1/2 LED .56" (14mm) digits
4. Conversion Time = 280msec
5. Auto Reset Time = 1 second
6. \*Signal Input = 50mv/1000A Meter Shunt
7. Input Impedance = 62 $\Omega$

##### B. Duration Meter

1. Basic Accuracy = 2%  $\pm$  2 digits
2. Range = 0.19 to 19.99 seconds
3. DPM Display = 3 1/2 LED .56" (14mm) digits
4. Auto Reset Time = 1 second
5. \*Signal Input = 50mv/1000A Meter Shunt
6. Input Impedance = 62  $\Omega$

##### C. \*Power Line Input = 90 to 120 VAC 4VA 50/60Hz

##### D. Temperature = 40 to 120°F (5 to 49°C)

##### E. Dimensions HxWxD = 4.7 x 4.7 x 2.5 inches (120 x 120 x 63mm)

##### F. Weight = 1.5 lb. (680g)

#### \*OPTIONS: SPECIFY WHEN ORDERING

1. AC/DC True RMS 1% 2 digit 0-6kHz CF4
2. Signal Input for AC or HWDC
3. Different Meter Shunt Signal input
4. 220 VAC Power Line input

##### G. External Controls

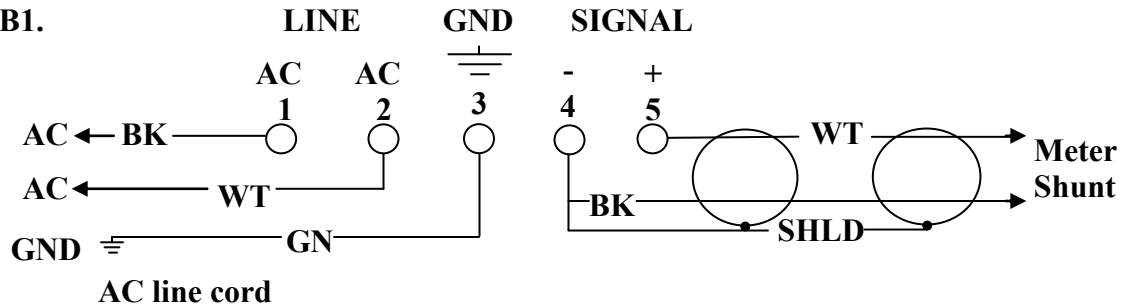
1. Auto Hold Switch
2. Current Meter AMP Adjust

##### H. Internal Adjustments

1. Zero

# AT-23 INSTRUCTIONS

## A. WIRING TB1.



## B. INSTALLATION

Select a mounting position that provides full view of DPM and clear of obstructions using the following mounting instructions.

1. **SURFACE CASE MOUNT.** i.e. To wall, panel, fan box or over old meter cutout.  
Drill 4 ea. Holes per rear view dimensions, 3 ½ x 3 ½". Secure case with your hardware.
2. Secure AC cord and signal leads to TB1 before mounting. Then route cord and signal leads through holes on back or bottom of rear case.

## C. OPERATION.

With panel switch to AUTO position DPM will display current and hold reading until next shot is taken.

With AUTO switch to OFF hold function is disabled for checking meter zero and zero current test.

Zero adjust is internal, remove case for access.

To calibrate DPM use small screwdriver in ADJ. hole and turn CW to increase or CCW to decrease meter reading.