# 9 Volt Battery Pack for Alicat Flow Meters and Pressure Gauges

A Battery Pack that uses a common 9 Volt battery can be mounted to the top of your 16 Series Flow Meter or Pressure Gauge. Power is passed from the battery to the flow meter through the 8 pin Mini-DIN connector. Output signals from the flow meter or pressure gauge are passed through the male connector on the bottom of the battery pack to the female connector on top of the battery pack so the signals can be accessed normally. Turn the switch on top of the battery pack off when the meter is not in use. (**Note:** The Battery Pack cannot be used with Flow or Pressure Controllers)

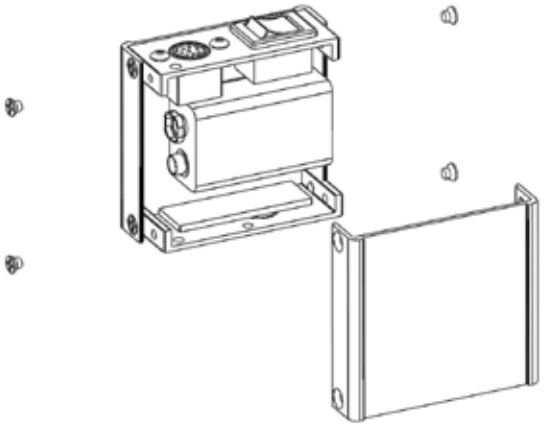
Normal (9V alkaline) battery life is approximately 8 hours (30-40 hours with a 9V lithium battery), however many factors can affect this. Replace the battery as often as required. A common indicator that the battery may be approaching the end of its life is a sharp increase in the temperature indicated on the meter. This false signal can result when the voltage drops below its normally regulated level. This can affect the accuracy of the meter, so it is good practice to check that the temperature is approximately correct (25°C is about room temperature) or use a fresh battery, especially if the measurement is critical.

***Alicat TFT (Color Display) Meters and Gauges*** equipped with the battery pack require the use of non-rechargeable 9V lithium batteries to achieve a run time of 2½ hours. Battery life can be increased by turning off the display when not required — press the Alicat logo button beneath the display to turn it on and off. Battery life may also be increased to some extent by reducing the brightness of the color display.

## Replacing the Battery:

*The battery can be replaced with the battery pack installed on the flow meter.*

1. Remove the four Phillips head screws from the back cover and gently remove it as shown below.
2. Remove the 9V battery, pulling the top of the battery out first.
3. Remove the old battery from the harness and replace it with a new battery.
4. Install the new battery bottom end first and replace the back cover so that the cushioning pad presses directly down on the battery.
5. Replace the four Phillips head screws.



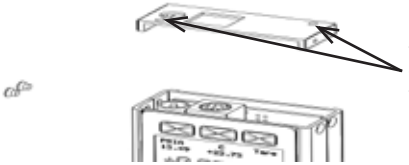
**Battery Pack Back Cover Removal**

## Battery Pack Installation and Removal:

**Note:** *The original meter case top must be removed and replaced with the one provided in order to mount the battery pack. The battery must be removed before the battery pack can be installed or removed.*

**Case Top Removal / Replacement**

1. Use the included T8 torx driver to remove the four screws securing the existing case top to the flow meter and remove the case top.
2. Carefully line up the provided battery pack compatible case top with the case.
3. Re-install the four torx screws to secure the new case top in place.




**Battery Pack Installation / Removal**

1. Remove the back cover of the battery pack and remove the battery if installed.
2. Carefully place the battery pack on top of the flow meter, being especially careful that the pins in the 8 Pin Mini-DIN plug are inserted properly in the socket on top of the flow meter. The two screws captivated in the bottom of the battery pack will not allow the plug to be completely inserted into the socket until they are screwed into place.
3. Slip the included hex wrench into either of the two holes on the top of the battery pack as shown below and start the screw into the corresponding threaded hole in the top of the meter.
4. Before the screw is tightened down all the way, move the hex wrench to the other hole and tighten the other screw gently down. Avoid over tightening the screw.
5. Return the hex wrench to the first hole and tighten the first screw gently down. Avoid over tightening the screw.
6. Install the battery and replace the back cover as previously described.
7. For removal of the battery pack reverse the above steps. **Note:** There is no need to change the case top again in order to use the flow meter without the battery pack.