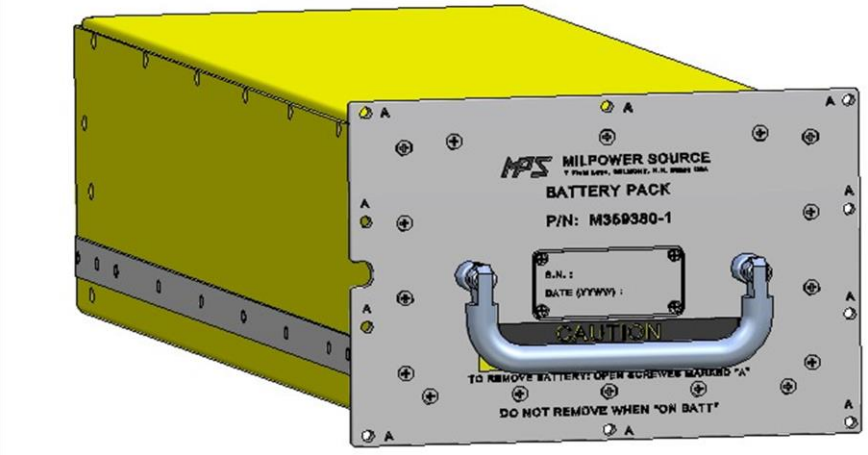
Datasheet

P.N M359380-1, M359380-6
Battery Pack

Used on UPS Model M359



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1. General

The M359380-1 is a replacement Plug-in Battery Pack intended for use in Milpower UPS Model M359. The battery pack houses eleven valve-regulated lead acid cells connected in series. Each cell is rated for 12V, 5AH, resulting in a total source of 132Vdc, 5AH. The cell construction and sealing technique ensures that no electrolyte leakage should occur from the terminals or case. The cells are packaged inside an aluminum case and are secure in place by epoxy. The Battery Pack contains a thermistor that enables the battery-charger of the M359, to trim the charging-voltage as function of temperature.

M359380-6 is identical to M359380-1 except for the type of chromate conversion coating of aluminum parts. M359380-1 coating is matching to M359-1 and M359-2 UPS while M359280-6 is matching to M359-3 UPS.

2. Caution!

Installing a Battery Pack other than the original M359380 that was produced and tested by Milpower Source, may result in a sever safety hazard and will invalidate the warranty of the UPS in which it was installed!!

High DC voltage (135VDC) is presenting in the M359380-1 I/O connector. This voltage is dangerous and when handling the Battery Pack care should be taken to avoid any contact with it.

The M359380-1 Battery Pack is heavy (52 pounds) and should be lifted by two persons.

The Battery Pack should not be opened! The internal cells cannot be safely replaced and an old Pack should be replaced with a new Pack.

The Replaceable Battery contains lead-acid batteries. Dispose the Battery Pack properly. Careless disposal (such as into a fire) may cause an explosion. Local regulations may require controlled disposal of lead-acid batteries. Please check your local regulations before disposal.

3. Characteristics

Nominal Voltage:	**132Vdc**
Capacity:	**5 Ampere Hours**
Hold-Up Time:	**10 Minutes at 1500W load (when installed in an M359 UPS).**
Storage Temperature:	**-20° to +72°C (Please see Para 4.1)**
Operating Temperature:	**0°to +52°C**
Nominal Weight:	**52 Lb**

4. Battery Service Life

The sealed, maintenance-free, lead-acid battery used in the M359 UPS is of the highest quality and when properly cared for have a life expectancy of 5 years. Nevertheless, it is a Limited Life Item and its life expectancy depends upon its operating and storage conditions. The three most important factors that determine the life of the battery are: temperature, storage conditions and the number and depth of charge-discharge cycles.

4.1. Temperature

The battery cells used in the M359380-1 are sealed and do not "dry up" or lose gasses. The end of service life of these cells is brought about by the gradual corrosion of the electrodes. This process is accelerated by high operating temperatures.
Every 10°C rise above 20°C will reduce the battery service life by half.

4.2. Storage Conditions

When lead-acid batteries are stored for extended periods of time, lead sulfate is formed on the negative plates and insulates them. The sulfating rate depends on the ambient temperature and the charge level of the battery. High temperature and low charge level accelerate the sulfating and reduce the battery life. In order to protect your battery from damage during storage:

a) Make sure to fully charge it periodically; every 12 months if the temperature is 23°C/73°F or lower, every 6 months if the temperature is 30°C/86°F and every 3 months if 38°C/100°F. For intermediate temperature; use linear extrapolation. Charging may be accomplished by using the M359 UPS (can be in a Standby Mode) for 6 hours, or by a suitable charger (Milpower's Model M346-1 Tester/Charger).
b) Store the batteries in a cool place (may be stored separately from the UPS).
c) Never store a discharged battery!!!

4.3. Charge-discharge Cycles

The number and depth of battery charge/discharges cycles affects the service life of the battery. If the battery is allowed to discharge only to 50% of its charge, the number of charge-discharge cycles (before it fails) will be three times the number of cycles had it been allowed to reach 30% charge. Battery life may be prolonged by limiting the operating time on battery power to the minimum required by the system to perform an orderly shutdown.

5. Replacing the Battery Pack

Please see the M359 Users Manual for Battery Replacement instructions.
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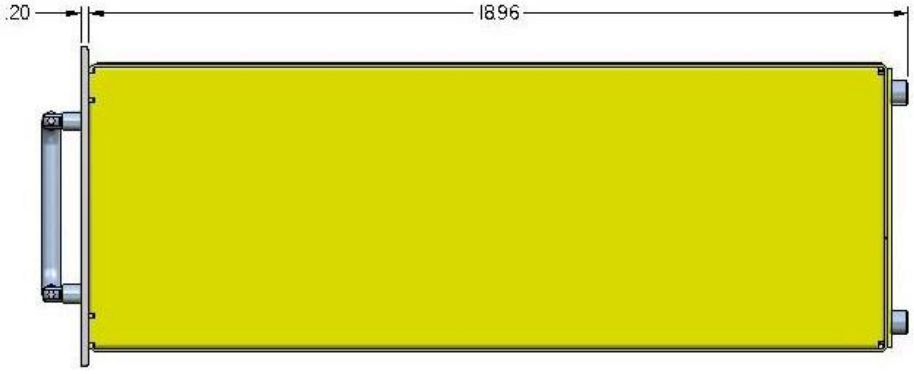
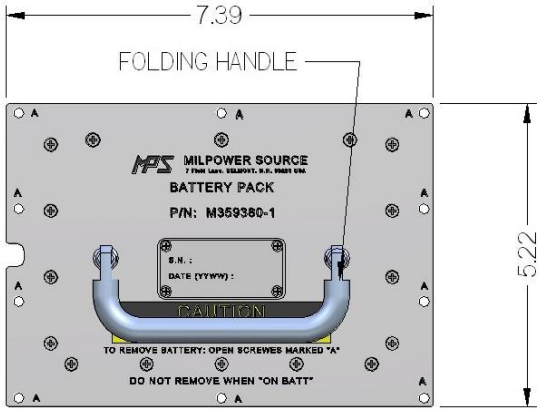
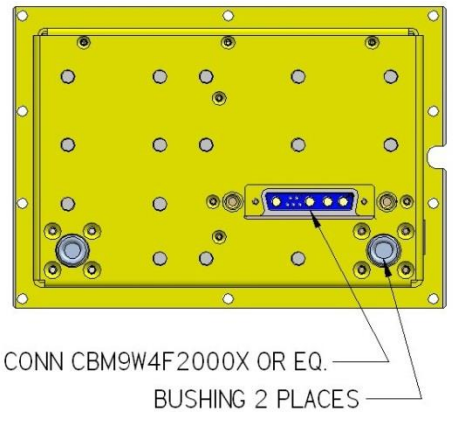
6. Outline Dimensions



Top View



Front View



Back View