

ACE-810V ACE-818C

DC Input 100W / 140W Power Supply with Battery Backup Function



TB3 Cable

The ACE-810V/818C is designed for mobile PC applications. The most valuable feature is that it has a secondary battery input that keeps the power supply running when the primary 12V DC or 24V DC is lost. Then the power supply switches to battery backup mode. ACE-810V/818C two kinds of signals VS1 and VS2. After the primary lost message is displayed, the PC may do a system shutdown that is controlled by the software program

SPECIFICATIONS



◆ Input:

Model	Input Range	Input Current
ACE-818C	+18V~+32V DC	10A@+24V DC
ACE-810V	+9V~+16V DC	14A@+12V DC

◆ Output Rating: (at 50°C)

Model	Rated Load				Max. Load			
	+5V	+12V	-12V	+5Vsb	+5V	+12V	-12V	+5Vsb
ACE-818C	16A	4A	0.5A	1A	20A	8A	0.5A	1.5A
ACE-810V	8A	2A	0.5A	1A	12A	4A	0.5A	1.5A

Note: The total output continuous power shall be kept under 140W at 24VDC input (ACE-818C)
The total output continuous power shall be kept under 100W at 12VDC input and forced air-cooling.
Without fan cooling is only 80W.(ACE-810V)

- ◆ Min. Load: +5V/0.5A +12V/0.2A
- ◆ Efficiency: Higher than 70% at 12V or 24VDC input
- ◆ Protection: over voltage, short circuit, and over load protection.
- ◆ Input polarity operation: When wrong polarity is connected to input terminal, should not cause any damage on the power supply.
- ◆ Power On Signal: This TTL compatible signal (active low) is use to switch ON the main output. When "Power ON" is disconnected from secondary common, all outputs except +5Vsb shall turn off.
- ◆ Battery Backup and Hold up time: Upon loss of DC input, the unit must operate from the battery. Hold up time is around 2 minute on the battery capacity.
- ◆ Built-in cooling fan
- ◆ MTBF: 110,000 hrs
- ◆ Vibration: 10Hz~55Hz at 2G, 3minutes period, 30 minutes along X, Y, and Z axis.
- ◆ Shock : 10G for 11ms half sine wave, one time for each of ±X, ±Y, ±Z axis.
- ◆ Safety: UL 1950, TUV EN 60950: 2000 meets CE
- ◆ EMI : Designed to meet the following radiation limited :
FCC docket 20780 curve "B" EN55022 class "B"
- ◆ EMS : Designed to meet the following limits
EN61000-4-2 4KV contact; 8KV air discharge Criterion B
EN61000-4-3 10V/M with 80% AM Criterion A
EN61000-4-4 2KV Criterion B
EN61000-4-5 0.5KV Criterion B
- ◆ Operating temperature : 0~50°C
- ◆ Storage temperature: -20 ~85°C
- ◆ Connectors : TB1- primary DC input: 3-position Terminal blocks
TB2-DC output: 6-position Terminal blocks
TB3-auxiliary 8-pin connector:
TB4-Battery input: 2-position Terminal blocks

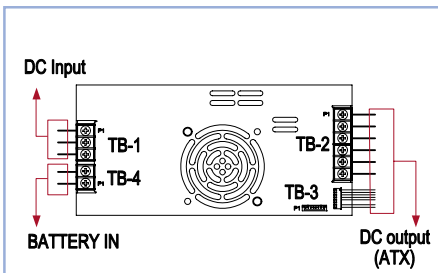
Pin Define

PIN	TB1	TB2	TB3	TB4
1	+	+5V	Vin signal 1 (Hi, Lo)	Battery (-)
2	-	+5V	Vin signal 2 (Hi pulse)	Battery (+)
3	E	GND	+5Vsb	
4		GND	GND	
5		+12V	Power on	
6		-12V	NC	
7			I/P Battery monitor (+)	
8			I/P Battery monitor (-)	

When Vin Signal 1 change state, Vin signal 2 will Provide one shot pulse between 0.2 sec and 0.6 sec

ORDERING INFORMATION

- ◆ ACE-818C +24V DC Input 140W ATX / Battery Backup Function Power Supply
- ◆ ACE-810V +12V DC Input 100W ATX / Battery Backup Function Power Supply

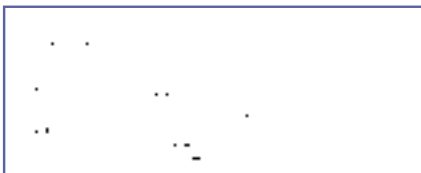


TB-3 C connector Application explain

- PIN1:** Power Good
- PIN2:** Pulse signal indication of DC input status
- PIN3:** +5Vsb
- PIN4:** Ground
- PIN5:** Power on
- PIN7/PIN8:** Measure battery capacity

*Notes: It can be used as an identifier by PIN2 signal while there are interrupt of DC power and recovery.

For ACE-810V/818C are not only applied as a power supply. It can be treated as a UPS (uninterruptible power supply) while combined with battery module .This series of power supply provide stable electronic and send signal from TB-3 of PIN2 for doing system control and configuration depending on user's demands. Moreover, it is easy to connect within voltameter for doing voltage monitoring.



Dimensions

