

Introduction

UPS 16 is a vehicle 12V DC line conditioner with Un-interruptible Power Source. It is engineered to protect computers and other sensitive electronic equipment's from noise, transients, load dumps, over voltage, under voltage, voltage dropouts and brown-outs. It provides short term uninterruptible energy source from its internal super capacitors, to operate the load continuously in the event of power interruptions or brown-outs. It is built for an automotive environment where reliability is not a compromise.

UPS 16 is a better choice in a battery operated environment where short time (in seconds) external storage is required to protect computers and other sensitive equipment from crashing. UPS 16 can provide upwards of 50,000 + of charge / discharge cycles before replacement or service. So, it provides trouble-free operation for many years.

A battery based UPS can provide long time storage but at a cost of replacing or servicing within a few hundred to a few thousand cycles. If you need operating time in minutes rather than in seconds then a battery backed UPS is a good choice. But, In many applications our UPS 16 is a better choice.

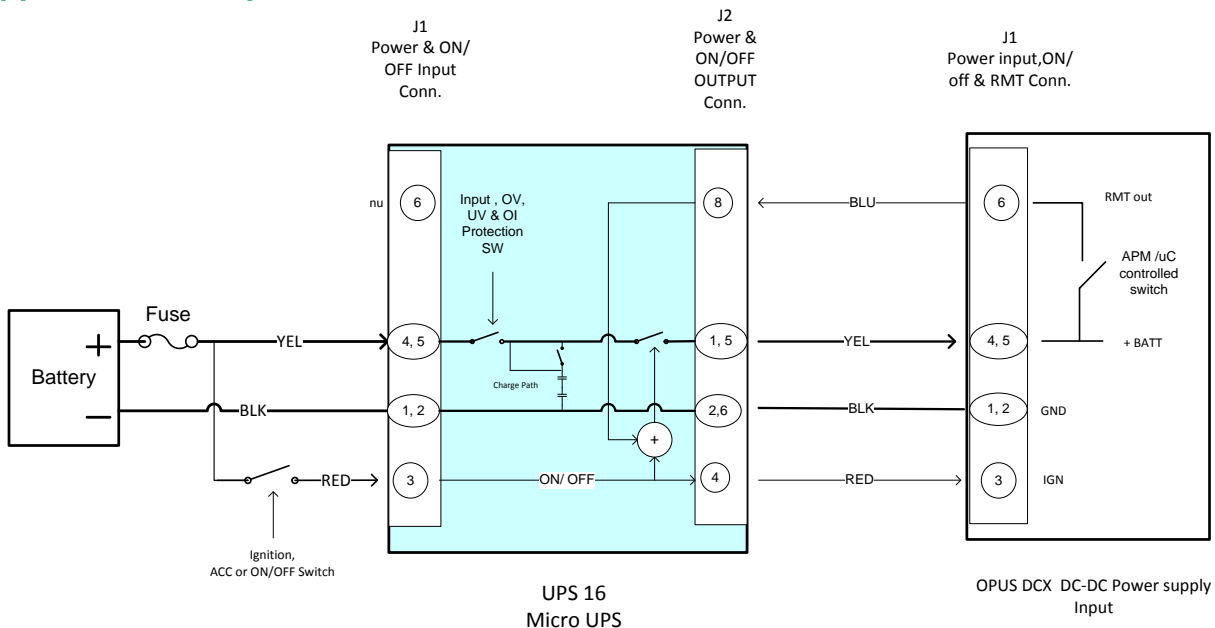
Features

- Transient protection
- Load dump protection
- Over voltage, under voltage and over current protection
- Short term un-interruptible Power source
- Ignition or on/off switch input and output
- Extended operating temperature range
- Minimum of 500X operating life compared to SLA Batteries.
- Very low to no maintenance
- Compatible with our DC-DC to provide seamless operation.

Applications

- Computers in Noisy environments,
- Heavy electrical equipment vehicles
- Transport and other buses.
- Police and Fire vehicles

Application Example



Technical Specifications

Normal operating input voltage range:	7.5V to 15.8V DC (12V Vehicle Battery System)
Peak input voltage range:	7V to 18V DC (less than 1Sec at 50% duty cycle repetition)
Idle state power consumption:	<3mA (no load condition)
Input Power Mating connector:	Plug: Molex: 39-01-2060; 2 x 6 Mini Foot Jr.
Input Protection:	LC Pi filter, TVS, noise and surge protection
Transient protection:	4500 W/ms max.
Over voltage limit :	16V
Over Current limit:	16A
Usable Stored energy:	1000 Joules Min. with normal operating voltage
Hold Time vs Load current:	
Load Current:	1A 2A 3A 5A 7A 9A
Maximum power hold time:	31Sec. 15Sec. 9Sec. 4.5Sec. 2.5Sec. 1.3Sec
Number of Charge and discharge cycles:	50,000 cycles Min.
Input Fuse:	20A mini blade (Automotive mini blade fuse)
Output protection:	Electronic fuse
Input Power mating connector:	Plug: Molex: P/N: 39-01-4030
	Crimps: Molex: P/N: 30490-2012
Output Power mating connector:	Plug: Molex: 39-01-2080; 2 x 4 Mini Foot Jr.
Low battery shutdown voltage:	6V
Ignition or ON/OFF input current:	<5 mA
MTBF:	250,000 hrs.
Cooling:	Convection air flow
Operating Temperature Range:	-20°C to 65°C non condensing 5% to 95% RH
Storage Temperature Range:	-40°C to 70°C
External Dimensions	
PCB Module dimensions:	127mm (L) x 52.5mm (w) x 46mm (H)
	5" x 2.1" x 1.8"
Weight:	150 Grams, 0.33 lb
Enclosed module dimensions:	153mm (L) x 59mm(w) x 50mm (H)
Weight:	tbd Grams, tbd lb

Ordering Information

Part Number	Description
UPS-16 12-180HUC	Vehicle DC-DC Line conditioner , input 12V System
UPS-16 12-180	Vehicle DC-DC Line conditioner PCB w/o case

Note: Supplied with a 8 to 6 pin Patch cable. Suitable for our DCX (not DCX6) and DCA series power supplies.