

# PowerCentre

## Portable Battlefield UPS System

### POWER MATTERS

Electrical power requirements for dismounted soldier operations, battlefield communications, situational awareness and surveillance systems have sky rocketed since the turn of the century.

Light weight field generators can pose problems with noise, exhaust detection and fuel supply in many operations. Individual equipment batteries often do not offer the run times required. PowerCentre fills this capability gap.

# POWER YOU CAN RELY ON

Just as with a conventional UPS, when normal power sources are not available, PowerCentre acts as a dependable back up, providing high quality filtered 24V DC power to allow even the most sensitive equipment loads to continue to be operated for extended time periods.

## UNIVERSAL OPERATION

When available, PowerCentre will run and recharge its internal batteries from even the most poorly regulated Generator supply (200-240V AC). All while supplying a smooth 24V DC output for equipment loads connected to it. When the mains supply fails, transition to the PowerCentre's back up battery supply is automatic and seamless.

## ANYTIME ANYWHERE

PowerCentre is designed and qualified to some of the strictest military environmental standards, allowing it to be deployed to operate in the harshest of battlefield conditions. Sealed to IP69K in use, PowerCentre will not be effected by dust or water ingress and can operate at a very wide range of ambient temperatures.

## SELF MONITORING AND PROTECTING

A sophisticated in-built monitor continuously measures the state of charge of internal batteries allowing the user to see at a glance how much power remains. PowerCentre also shuts down the battery supply automatically before batteries are discharged to a level where they may be damaged, ensuring excellent long term reliability.

# OPERATION

Operating a PowerCentre is simple.

Control and monitoring is via a panel underneath a protective flap on the top of the unit.



The panel includes resettable circuit breakers for both AC input and DC output as well as an on / off switch for the DC output.

In addition there are indicators for battery state of charge and "built in test" warning LED's in the unlikely event of an internal power supply or battery charger fault.



On the front of the PowerCentre there are two military connectors, one for AC input and one for DC output.

# RUN TIMES

Approximate - running from fully charged internal batteries:

24V LOAD	RUN TIME
2 AMPS	23 HOURS
4 AMPS	12 HOURS
6 AMPS	8 HOURS
8 AMPS	6 HOURS
10 AMPS	5 HOURS
12 AMPS	4 HOURS

The approximate recharge time from the mains or a generator with no output load is 7 hours.

Please note: PowerCentres can also be paralleled to increase run times. Custom PowerCentres with different battery capacities and input / output current limits are also available on request.

# BATTERY MAINTENANCE

Simply remove the top cover exposing the battery pack. Batteries are then lifted out with the pre-installed maintenance handles so that replacements can be dropped in.



# SPECIFICATIONS

## AC INPUT

Voltage	200 to 240V AC 50 / 60 Hz
Protection	10A circuit breaker (B-type)
Power	

## FILTERING DC & AC

Differential / common mode  
LEMP protection LINE-LINE and  
LINE-GROUND. 250J (2mS). 10kA  
(8/20uS)

## DC OUTPUT

Mains PSU	24V DC +/- 0.5V @ 12A maximum
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## BATTERY OUTPUT

Output	15A circuit breaker
Protection	(B-type)
Battery Type	EnerSys SBS B8 thin plate pure lead VRLA
Configuration	Series / parallel 4-pack
Capacity	62Ah (c20 rate)
Battery	Automatic deep dis- charge self shutdown

## CHARGER

Output	7A bulk mode, then top up charge
O/P Fuse	10A (user fit)
I/P Fuse	5A (user fit)

## DIMENSIONS AND WEIGHT

L 612 x W 232 x H 292mm  
55Kg (2 man lift)

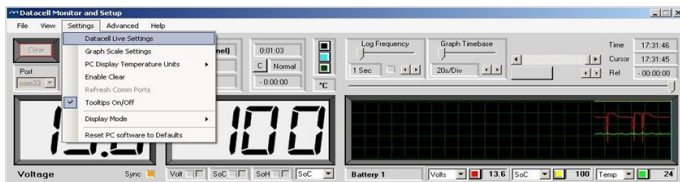
**MERLIN**  
POWER SYSTEMS

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# SUPPORT & STANDARDS COMPLIANCE

## SOFTWARE

PowerCentre can be connected to a PC to run diagnostics software for its on-board batteries. Software is supplied free of charge.



## A COMPREHENSIVE APPROACH

We at Merlin pride ourselves on our friendly and professional customer service. Whether it is a support visit to assist with your application, supplying user manuals and CAD material or defining and delivering a full ILS package, we are here to help and pleased to do so.



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## STANDARDS

Def-Stan 59-411

Electromagnetic Compatibility

Pt3 Sec7.5, DSC05, DCS06,  
DCS10

(Includes EMP, LEMP and NEMP)

2006 SI 2006/3418

Electromagnetic Compatibility

Def-Stan 00-35

Environmental

Pt3 and Pt4

Def-Stan 81-41

Packaging

BS EN 60204-1

Safety of machinery. Electrical equipment of machines. General requirements.

