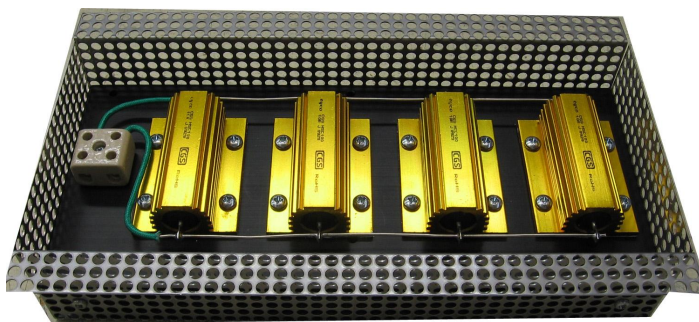




User Manual

+**BCTLOAD**

Resistor Loads for Battery Condition Testing



0 - 230 Watts

Safety

This equipment is designed to comply with information technology/business equipment standard IEC950.

As stand alone equipment, the design allows for simple connection to mains and output.

The user is responsible for ensuring that input and output wiring segregation complies with local standards and that in the use of the equipment, access is confined to operators and service personnel.

HAZARDOUS VOLTAGES EXIST WITHIN A POWER SUPPLY ENCLOSURE AND ANY REPAIRS MUST BE CARRIED OUT BY A QUALIFIED SERVICEPERSON.

Electrical Isolation Testing

Electric strength tests: Components within the power supply responsible for providing the safety barrier between input and output are constructed to provide electrical isolation as required by the standard. However EMI filtering components could be damaged as result of excessively long high voltage tests between input, output and ground. Please contact our technicians for advice regarding electric strength tests.

Earth Leakage

The internal interference suppression circuit causes earth leakage currents which may be to the maximum allowable of 3.5mA. A low resistance earth connection is essential to ensure safety and additionally, satisfactory interference suppression.

Ventilation

High operating temperature is the cause of the majority of power supply failures. For example a 10°C rise in the operating temperature of a capacitor may halve its expected life. The rated operating temperature of the equipment is the highest test temperature at which internal components will provide maximum lifetime consistent with flexibility in application.

A switchmode power supply with a rated efficiency of 85% at full load draws 1.18 times the output power from the input. This extra power is lost as heat within the circuitry of the unit. Cases and heatsinks are designed to provide maximum transfer of heat to the surrounding air. However, if airflow is constrained within a cabinet, a unit will heat its environment and operate at an elevated temperature. The final operating temperature therefore must be considered in the design of a system for maximum trouble free service life.

Batteries and cooling fans may also suffer drastically shortened lifetime if subjected to high ambient temperatures - both should be included in a routine maintenance schedule to check for signs of reduced efficiency.

Water / Dust

Every effort must be made in the installation to minimise the risk of ingress of water or dust. Dust settling on internal heatsinks will degrade their ability to radiate heat and will also attract moisture, thus possibly causing leakage currents and circuit damage. All electrical equipment should be cleaned free of any dust accumulation at regular intervals.

Electromagnetic Interference (EMI)

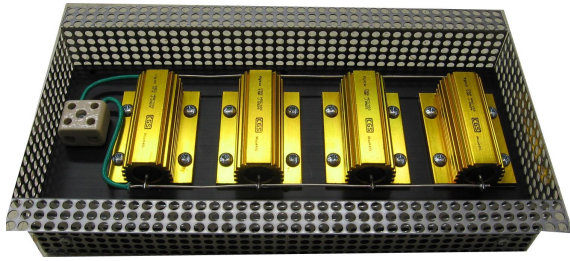
Switching power supplies and DC-DC converters inherently generate electrical noise.

A major aim at the design stage is to suppress switching noise to at least the levels required by the various standards. Residual noise is nevertheless capable of causing interference in associated equipment if susceptible.

Generally, power supply and susceptible equipment wiring should be well segregated, as short as practicable and all equipment well earthed.

Residual noise can be reduced by looping DC wiring through ferrite cable sleeves. These are most effective as close to the power supply as possible and as many turns of the wire taken through the core (+ and - in the same direction) as the core will accommodate.

For more information, contact our sales office or your distributor.



+BCT LOAD

FUNCTION

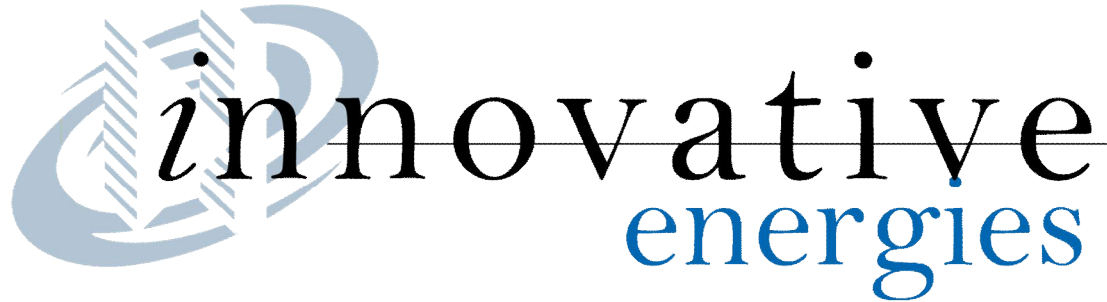
Adds a controlled load for performing a battery condition test using the **No-Break™DC** power supply. Designed to suit specific applications. Typical models shown below.

MODEL CODES

Model	Rating	Notes
+BCT LOAD	200W, (20A Max)	Wall mount
+BCT LOAD-RACK	200W, (20A Max)	2U RACK
+BCTLOAD24-230-SA	24V, 230W	225W x 308D x 74H mm, fan cooled, enclosed



+BCTLOAD24-230-SA



Global Solutions Personal Focus

TERMS OF WARRANTY

Innovative Energies Ltd warrants its power supplies for 24 months (two years) from date of shipment against material and workmanship defects.

Innovative Energies' liability under this warranty is limited to the replacement or repair of the defective product as long as the product has not been damaged through misapplication, negligence, or unauthorized modification or repair.

Thank you for purchasing from Innovative Energies.

We trust your power supply will exceed your expectations and perform for years to follow.

Sincerely,
The Innovative Energies team.

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