## Battery Charge Regulator (BCR)

U R Rao Satellite Centre (URSC) of Indian Space Research Organisation (ISRO) has developed Battery Charge Regulator (BCR) for battery charging and bus regulation. Battery charge regulator (BCR) is designed with Constant Current-Constant Voltage (CC-CV) and BUS priority loop to cater to LEO as well as GEO Satellites. The main feature of the BCR is that it has a mechanism to give priority to the load requirements in preference to battery charging whenever there is a power generation deficit in the solar array.



Battery Charge Regulator (BCR)

## **Specifications:**

- TEM mode operation in cavity.
- Narrow bandwidth.
- Symmetric skirt response.
- High rejection bandwidth.
- Coaxial interface.
- Compact and light weight.
- Mechanically robust.
- Mass production suitability.

## **Major Specifications:**

Dimensions $(L \times W \times H)$	:	286×70×212 [mm]
Mass	:	2500 gram
BUS Voltage	:	71 Volts
Power Dissipation @ BCR Pout =700W	:	< 30 Watt
Current TM	:	0-5V
Output Current (Selectable)	:	0 -> 10A (00H -> FFH)
Output Voltage (Selectable)	:	0 -> 67.2V (00H-> FFH)
Output Power Capability	:	800Watt (Max)
Efficiency @ BCR Pout =700W	:	>95%
Output Current	:	10A
Over Current Protection	:	> 12A

## **Technology Transfer from ISRO**

ISRO is willing to offer the knowhow of this technology to suitable entrepreneurs / industries in India. Capable manufacturing industries interested in acquiring this knowhow may write with details of their present activities, requirements and plans for implementation, infrastructure and technical expertise available with them, their own market assessment, if any, and plans for diversification to the address given below: