

# Power Conditioning and Processing Unit

SAC has developed a Power Conditioning and Processing Unit (PCPU) for use in microwave remote sensing missions. PCPU is a very complex multi output dc - dc converter that delivers around 100W of peak power and around 10W of average power. Here, Planar magnetics is used for the first time which was realized using 18 and 16 layer PCBs.

## Technological Features

- Thick film technology
- SMT technology
- Planar Magnetics
- Magnesium alloy for weight reduction
- Hybrid Micro- Circuits

## Salient Features of PCPU

- Powers a pair of V&H TR Modules and a TRC unit
- 10 outputs: 8 pulsed+ 2 continuous
- 59W pulse output power
- 9.1W average output power
- High BW pulse modulators for fast rise & fall times on pulsed outputs
- In-built EMI filter isolates the satellite bus from the pulsed load transients



ISRO offers to license this technology of PCPU to industries with adequate experience and facilities. Enterprises interested in obtaining knowhow may write giving details of their present activities, infrastructure and facilities to us.