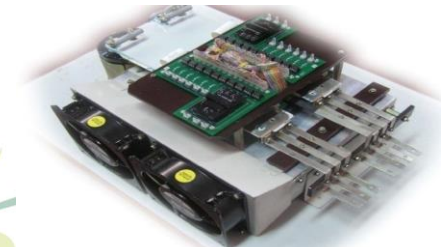


**Mousuni Island**

- ❑ 1 panel (3 x 10 kW, with isol. trafo)
- ❑ Interfaces PV, Wind, bio-mass, battery
- ❑ Both off-grid & grid-connected modes
- ❑ **Design of Hardware & Controls: IITK**
- ❑ **Engg. & fab. : CDAC-Trivandrum**



**Single panel**



**Basic module**

Govt of India (through CDAC-T, nodal agency)  
Implementation Agency: WBREDA, Kolkata

P. Sensarma, IIT Kanpur, INDIA.

- Modular expansion concept: investor friendly
- Allows *critical mass* accumulation
- Allows aggregation till MW scale
- Allows integration of wind, hydro & bio-mass generation
- Challenge:** large storage & low-cost communication backbone

- No dc cabling, dc switchgear
- Easy installation
- Suitable for household clusters
- Basically for solar PV
- Challenge:** Cost!

55 kVA, 3-phase,  
415 V, 50/60 Hz  
**back-to-back  
converter**,  
multi-string,  
60°C ambient



*Scaling*

350 VA, 1-phase,  
230 V, 50/60 Hz,  
PV panel  
mounted, 2-stage,  
**micro-inverter**

