



CINVESTAV-IPN
ESIME-IPN

New result of rural solar concentrator cooker with 2.3 kW_{th} available power

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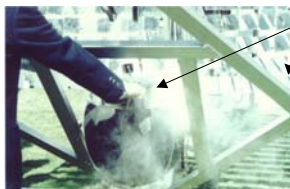
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Technical specification


CINVESTAV-IPN
ESIME-IPN

- 64% -30% global efficiency (dependent over solar condition, wind and ambient temperature)
- 8 liters cooking volume in commercial pressure cooker
- US €3.0 per kW-h equivalent at 30 year lifetime
- US \$1.3 per Watt-peak installed at 5.2 h-p direct radiation condition
- Sterilization, desalination and cooker performance at 120 °C (1.05 kg/cm²)
- 2.3 kW thermal energy available
- 16 liters of thermal oil storage (30 -60 minute) and uniform heat
- 360 X concentration factor employing 100 cm² mirrors



CINVESTAV-IPN
ESIME-IPN

New results

- 5 W-p PV module-based stand alone solar tracking for two DC motors at 36 W over MPPES concept
- Avoid to use over 2.87 Ton/year of fire wood
- Avoid 5.32 Ton/year of CO₂ emission
- Can cooker corns and beans over commercial pressure cooker, basic food for mexican people.

