CINVESTAV-IPN
ESIME-IPN

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

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Technical specification

CINVESTAV-IPN
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- **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/cm^2)**
- **2.3 kW thermal energy available**
- **16 liters of thermal oil storage (30 -60 minute) and uniform heat**
- **360 X concentration factor employing 100 cm^2 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 CO_2 emission**
- **Can cooker corns and beans over commercial pressure cooker, basic food for mexican people.**