### Zrenjanin Hospital, Serbia



Photo: Thermosolar

# Zrenjanin Hospital, Serbia solar collectors on the outdoor parking lot

#### **PROJECT**

The project "Solar energy for Vojvodina", financed by the Government of Slovakia, brought to Zrenjanin town hospital 400 square meters of solar panels. This is the first medical institution in Serbia that uses solar energy. The installation enables heating of sanitary water and consequently allows savings of around 265,000 kilowatt-hours per year.

The solar collectors are mounted as a roof over the outdoor parking lot.





Photo: Thermosolar

#### **Heating system**

The solar system, installed over the outdoor parking lot, provides hot water for sanitary use. The hospital consumes around 30,000 litres of hot water every day.

Auxiliary heating is gas.

Collector area; 400 m2,

Heat store description: 10 000l water storage



#### **SOLAR COLLECTOR**

Type:

Flat plate metal collector
TS 300 (producer THERMO/SOLAR Ziar)

TS 300 suits for small and large solar systems. These collectors are connected in parallel and can be mounted in blocks from up to 10 collectors.

Dimensions (mm):  $2009 \times 1009 \times 75$ 

Weight (kg): 36

Efficiency ( $\eta_0$  ( $\Delta T=0$  K) %: 77,6 (aperture)

Read more about the solar collector:

http://www.thermosolar.sk/stara\_stranka/aa-eng.htm

#### **ECONOMY**

Collector prize; 364,8 € /2009Solar gain; 265 000 kWh/yearSystem price; 165 000 € / 2009



## **PHOTOS;** THERMO/SOLAR Ziar

- Built: 2009
- Project designers: prof. Lambic, Technical University Zrenjanin
- Consultants: Pavol Falat
- Project management: Jan Tomciak
- Location:
   Province Vojvodina,
   town Zrenjanin
   Republic of Serbia
- Project period: 2009
- Type of project: Institution

