

Solar Pumping for Water Supply

Solar Pumpstation

VILLAGE OF TAMTAM, SUDAN



The Sahara is one of the sunniest and also the driest regions on earth. Water here is a scarce resource but is essential for daily life. The village of Tamtam is located in the north of Sudan on an inter city road linking the capital Khartoum with the northern cities of the Nile and leading 300km through pure deserts. This settlement was built with several service areas and residential buildings and a school. The water required for life must be pumped up from about 100 m depth using energy.



MENA-Water has now installed a photovoltaic solar pumping system whose 9.2 kW_p power allows the operation of a DC borehole pump to provide an average of 72 m³ of water per day. Next to supplying drinking water for habitants and travelers now as well it is possible to irrigate protective plants that provide food, shelter from storms and at the same time improve the local climate.

Daily values TECHNICAL DATA 80 Output [m³] • Photovoltaic Modules: 32 Pcs • Area for Modules: 80 m² Energy [kWh] • Module Power: 9.2 kWp Average Water Flow: 72 m³/d • Borehole Pump: 6" / 180m / 12m3/h

