## **EFFICIENT WALL MOUNTED SOLAR WATER HEATER**



## **OUR PRODUCT**

The NEXOL solar water heater NEX-P40 is designed to heat domestic water. It works with a thermoelectric element that allows it to use the thermal energy from the environment. By using that additional energy, we assure that the electric energy coming from the photovoltaic panel is enough to heat up the water, even when the boiler is not connected to the grid. That's why our product is especially designed to run with solar energy coming from PV-panels. The perfect combination of the thermoelectric element working together with the photovoltaic panel is what we call the photovolthermic principle.

Thanks to the design of the NEX-P40 with a low number of moving parts it has low maintenance costs and a long lifespan. Also, for installation you do not need any more than a cable straight to the PV-panel and a water supply. This leads to an easy installation and therefore lowers the installation costs.



thermal energy = photovoltaic energy + absorbed energy

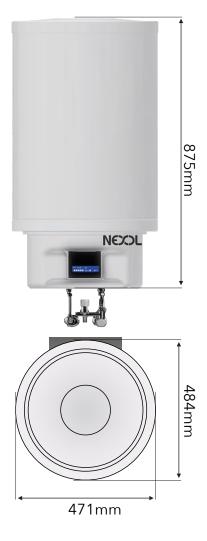
\* Depending on ambient temperature and solar radiation.

|  | NEX-P40   | solar<br>thermal  | heat<br>pump | electric<br>boiler |
|--|---|---|--------------|--------------------|
| Low storage losses                                       | <ul> <li>Image: A start of the start of</li></ul> | ×   | ~            | ×                  |
| Simple one-man installation                              | ~   | ×   | ×            | ~                  |
| Low energy requirement                                   | ~   | <ul> <li>Image: A start of the start of</li></ul> | ~            | ×                  |
| Off-grid operation possible/use of regenerative energies | $\checkmark$  | ~   | ×            | ×                  |
| Functionality with only a few hours of sunlight          | ~   | ×   | ~            | ~                  |
| Low maintenance  | <ul> <li>Image: A start of the start of</li></ul> | ~   | ×            | ~                  |
| Purchase price (for comparable quality)                  | medium  | high  | high         | low                |
| Running costs  | low   | low   | medium       | high               |



Hot water for a cool planet!

## NEX P40



| Water Capacity [L]                                 | 40                       |  |  |
|--|--------------------------|--|--|
| Design   | Wall-mounted             |  |  |
| Heating Element                                    | Copper                   |  |  |
| Heat Source  | Thermoelectric Heat-Pump |  |  |
| Dimensions (h x d x ) [mm]                         | 875 x 484 x 471          |  |  |
| Empty Weight [kg]                                  | 24                       |  |  |
| Maximum Power Consumption Heat-Pump [W]            | 210                      |  |  |
| Maximum PV-Input [W]                               | 330                      |  |  |
| Maximum PV open circuit voltage [V]                | 48                       |  |  |
| Maximum PV short circuit current [A]               | 14                       |  |  |
| PV terminals                                       | MC4                      |  |  |
| MPP-Tracking                                       | Included                 |  |  |
| Maximum pressure [Bar]                             | 7.5                      |  |  |
| Average COP [-]                                    | 2                        |  |  |
| Maximum Water Temperature [°C]                     | 65                       |  |  |
| Mean heating time (15°C to 50°C at 80 W input) [h] | 10                       |  |  |
| Average temperature loss after 8 hours [°C]        | 2.65                     |  |  |
| Water connection ["]                               | 1/2"                     |  |  |
| Grid-Connection (Optional)                         |                          |  |  |
| Converter Input Voltage [V]                        | 110-230                  |  |  |
| Converter Input Frequency [Hz]                     | 60-50                    |  |  |
| Converter AC Terminal                              | C6                       |  |  |
| Converter Output Voltage [V]                       | 19                       |  |  |
| Converter Output Current [A]                       | 4.75                     |  |  |
| Input Terminal [mm]                                | 5.5 x 2.5                |  |  |





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