

Lubi

LSY SERIES

AC **SOLAR** CENTRIFUGAL MONOBLOCK PUMPS



INFINITE **SOLAR** PUMPING ENERGY



Introduction

Existence of human life in rural India depends largely on the availability of clean water to people, livestock and crops. Farmers in rural India can only become prosperous if there is availability of clean water for their farms, homes and livestock. In many parts of India there is a shortage of reliable power for homes and irrigation of fields where Lubi **LSY** series of Solar Surface Pumping systems can make a remarkable contribution.

The LSY Solar Surface Pumping systems offered by Lubi is a state of the art high technology product designed to provide a green and energy efficient solution for a reliable water supply where there is no access of clean water and electricity.

The LSY Solar Surface Pumping systems comprises of the following equipment.

- ☐ Solar Surface Pump
- ☐ Solar photovoltaic panels with mounting structure
- ☐ Automatic controller for the solar pump
- ☐ Cables and accessories.

Application

- ☐ Flood irrigation of small fields
- ☐ Drip irrigation for farms
- ☐ Cattle watering
- ☐ Water supply for small villages, schools, hospitals and homes.

Range of Performance

Maximum flow	: 891000 LPD
Maximum head	: 30 metres.
Rating	: 1.0 hp to 10.0 hp (1.5 kW to 7.5 kW)

Features & Benefits

- State-of-the art design.
- Highly energy efficient surface solar water pump with energy efficient inverter duty motor.
- High efficiency solar photovoltaic panels with a service life of minimum 25 years.
- Robust design Galvanized steel mounting structure for long life.
- High technology automatic controller with dynamic MPPT (Maximum Power Point Tracking) control method.
- The Controller offers complete protection against under and over voltage and dry run protection for the pump.
- Highly efficient controller with a conversion efficiency of 97%.
- The controller is tropicalized to operate satisfactorily with an ambient temperature of up to 50°C.
- Virtually no maintenance cost.
- Environmentally friendly air and noise pollution free solution.
- Simple and easy installation.
- Cost efficient pumping.
- Very strong ROI against diesel powered pumping systems which reduces production costs and carbon foot print
- Large range of pumps to closely match each application.
- Specific demands and optimize efficiency.

Operating Conditions

Ambient temperature	: +50°C
Liquid temperature range	: 0°C to +60°C
Water pH	: 6.5 - 8
Sand content	: 25 g/m ³

Type Keys

LSY	A050	15L	4.8K
Type range	Motor type	Pump type	Total solar panel Watt
LSY = Solar Centrifugal Monoblock Pumps	A010 = 1.0 hp (0.75 kW) AC A020 = 2.0 hp (1.5 kW) AC A030 = 3.0 hp (2.20 kW) AC A050 = 5.0 hp (3.70 kW) AC A075 = 7.5 hp (5.50 kW) AC A100 = 10.0 hp (7.50 kW) AC	29HL 21* 53 47 18A 15L 11L 27L 28 25 38 37L 33	1K = 1200 watt solar panel 2K = 1800 watt solar panels 3K = 3000 watt solar panels 4.8K = 4800 watt solar panels 7K = 6750 watt solar panels 9K = 9000 watt solar panels

Minimum Cost of Ownership

Very often investment decisions for pumps are based only on the purchase cost of the pump. This initial purchase cost is a fraction of owning and operating a pump over its entire life span. The initial cost for diesel engine driven pumps is just 5% of the total life cycle cost with operation (energy) and maintenance cost contributing to 85% and 10% respectively.

Solar water pumping systems when compared to diesel engine driven pump sets are much higher in the initial purchase cost but over the life cycle of the solar pumping system they provide significant financial savings in terms of operation (energy) and maintenance costs. Typically when solar pumps are compared with diesel engine pumps they offer a breakeven in costs within 4 to 8 years depending on site conditions, installations cost, and model specification. After the breakeven, the solar pumping systems provide significant cost savings to the owners.

Technical Data

Sr. No.	Item Code	HP	Voltage (V)	Head (m)	Suc. x Del. Size (Inch)	Discharge (LPD)	Recommended SPV Power (Wp)	PV Module Configuration (535 Wp)
01	LSYA01029HL1K	1.0	55	10	2.0 X 1.5	89,100	1000-1200	2 X 1
02	LSYA020211.8K	2.0	110	10	3.0 X 3.0	1,78,200	1800	4 X 1
03	LSYA030532.7K	3.0	160	10	4.0 X 4.0	2,67,300	2700	5 X 1
04	LSYA030472.7K	3.0	160	20	2.0 X 2.0	1,32,300	2700	
05	LSYA05018A4.8K	5.0	260	10	4.0 X 4.0	4,75,200	4800	9 X 1
06	LSYA05015L4.8K	5.0	260	20	3.0 X 2.5	2,35,200	4800	
07	LSYA05011L4.8K	5.0	260	30	2.0 X 1.5	1,68,000	4800	
08	LSYA07527L7K	7.5	380	10	4.0 X 3.0	6,68,250	6750	13 X 1
09	LSYA075287K	7.5	380	20	4.0 X 4.0	3,30,750	6750	
10	LSYA075257K	7.5	380	30	3.0 X 2.5	2,36,250	6750	
11	LSYA1003810K	10	470	10	4.0 X 4.0	8,91,000	9000	17 X 1
12	LSYA10037L10K	10	470	20	4.0 X 3.0	4,41,000	9000	
13	LASY1003310K	10	470	30	2.5 X 2.0	3,15,000	9000	

Note : PV Array Configuration should be suitable to Controller Technical Specification and Motor Voltage Design.

Farming



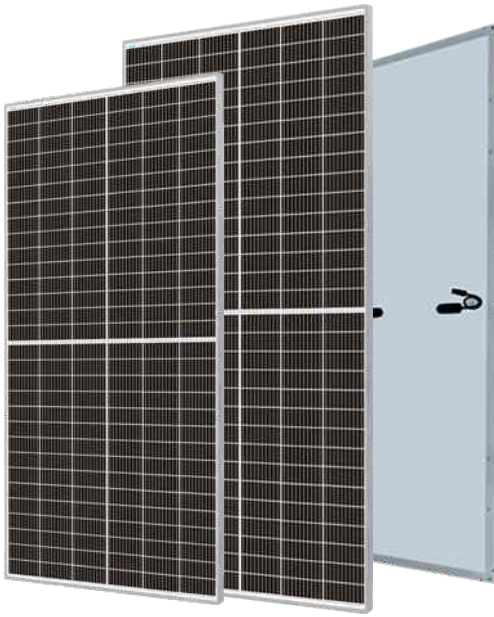
Drinking Water & Sanitation



Drip Irrigation



Solar Module



Fully Automatic
150MW
Manufacturing Line

Other Range of Solar Water Pumps



- AC Submersible Pumps Range : 0.5 HP ~ 20 HP
- AC Surface Pumps Range : 1.0 HP ~ 10.0 HP
- DC Submersible Pumps Range : 1.0 HP ~ 10 HP
- DC Surface Pumps Range : 2.0 HP ~ 10.0 HP



LUBI INDUSTRIES LLP

Near Kalyan Mills, Naroda Road, Ahmedabad-380 025, INDIA.

Phone : +91 - 79 - 61700100, Fax No. : +91 - 79 - 61700399.

Sales Enquiries: indsales@lubipumps.com, mktsales@lubipumps.com

www.lubipumps.com

Product Improvement is a continuous process at 'LUBI'. The data given in this publication is therefore subject to revision.

Customer Care Number : 09824200800



ISO 9001



ISO 14001