

3" AC/DC STAINLESS STEEL IMPELLER SOLAR PUMP

MATERIAL & FEATURES

- ▶ **Motor:** Permanent-magnet synchronous (PMSM) — up to 92% efficiency, 20–30% more energy-saving
- ▶ **Drive / MPPT:** Sensorless FOC sine-wave drive · MPPT >99% · LED display (V/A/W/RPM/error)
- ▶ **Wetted parts:** 304 stainless steel impeller · stainless steel body · 304 stainless steel outlet
- ▶ **Power:** Solar DC or 220 V AC (90–240 V, 50/60 Hz) / generator — external transfer switch
- ▶ **Material grades:** SUS304 standard · SUS316 optional for coastal / brackish water
- ▶ **Key components:** 100% copper motor windings · NSK-grade sealed ball bearings · SUS304 shaft & impellers (SUS316 optional) · Silicon-carbide (SiC) mechanical seal
- ▶ **Ingress:** Motor IP68 (submersible motor) · Controller IP66 · Class F insulation · oil cooling
- ▶ **Protection:** Dry-run · over/under-voltage · overload · over-current · reverse · over-temp · soft-start
- ▶ **Cable:** PV-to-controller & motor cable 2.5 mm² by model (copper, sized for a ~50 m run; step up one size per additional ~50 m of drop).
- ▶ **Warranty:** 3 years
- ▶ **Standards:** CE · RoHS · CB · TUV · SGS · ISO 9001 · ISO 14001 · IEC 62253



200 m
MAX HEAD

4.5 m³/h
MAX FLOW

600–2200 W
POWER

92%
EFFICIENCY

3 yr
WARRANTY

APPLICATIONS



Irrigation



Livestock



Village supply

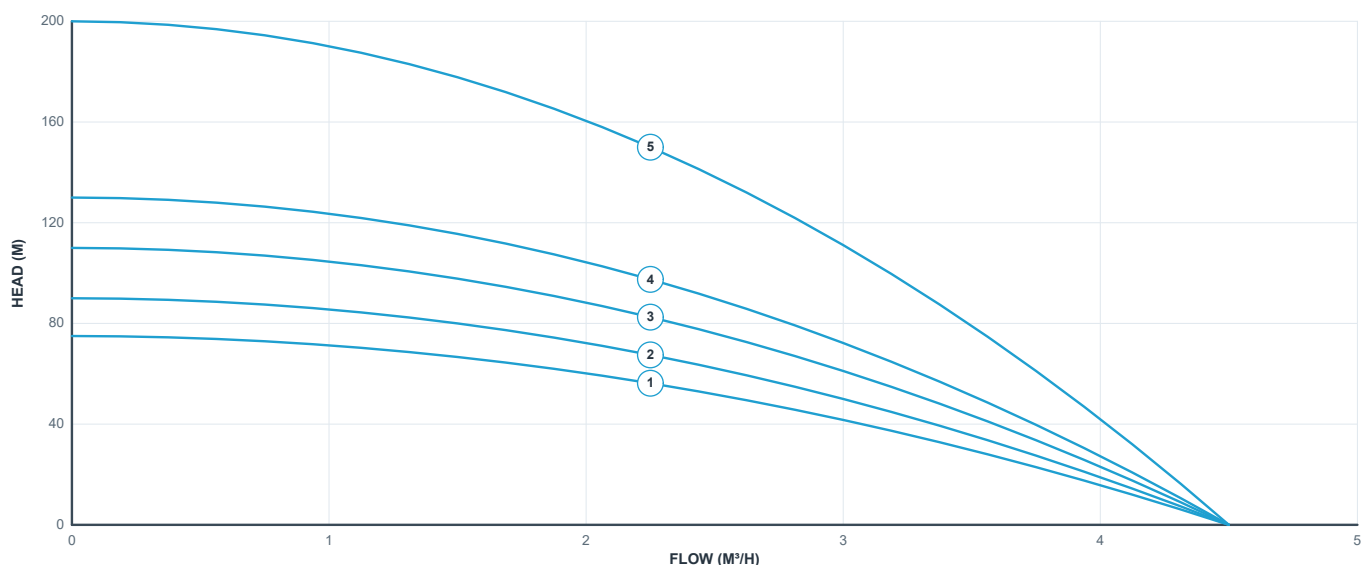


Off-grid



Industry

PERFORMANCE CURVES (Q–H)

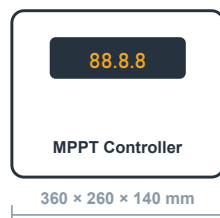


3" AC/DC STAINLESS STEEL IMPELLER SOLAR PUMP - SPECIFICATIONS

Model no.: size (") · type · max flow (m³/h) – max head (m) – system voltage (V) – power (W)

NO.	MODEL	VOLT. (V)	INPUT Voc (V)	POWER (W)	MAX FLOW (M³/H)	MAX HEAD (M)	OUTLET (inch)	REC. PV
1	3PPSS4.5-75-72-600-H	72	60~150	600	4.5	75	1.25"	3 × 300 Wp
2	3PPSS4.5-90-96-750-H	96	60~200	750	4.5	90	1.25"	3 × 300 Wp
3	3PPSS4.5-110-144-1100-H	144	90~340	1100	4.5	110	1.25"	6 × 300 Wp
4	3PPSS4.5-130-192-1500-H	192	90~430	1500	4.5	130	1.25"	8 × 300 Wp
5	3PPSS4.5-200-280-2200-H	280	100~490	2200	4.5	200	1.25"	10 × 300 Wp

DIMENSIONS & WEIGHT



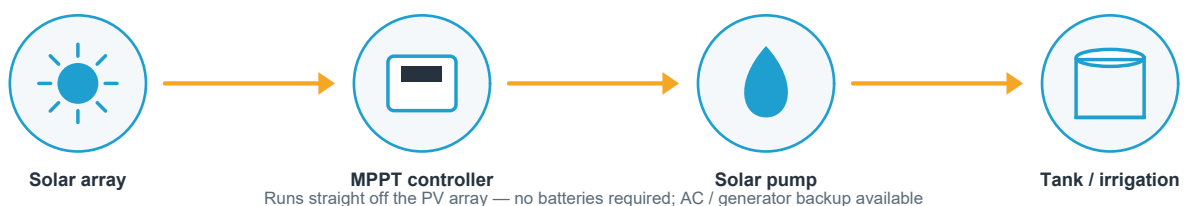
KEY DIMENSIONS

Pump outer Ø	74 mm
Min. borehole	76 mm
Overall length	840–1355 mm
Net weight	7.5–14.2 kg
Controller size	360 × 260 × 140 mm
Controller weight	7 kg

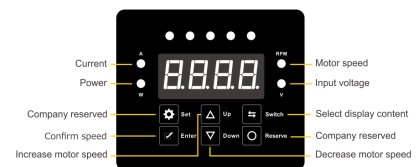
OPERATING CONDITIONS

Liquid temp	0–40 °C
Max. sand	≤ 0.05 % (≤ 500 g/m³)
pH value	5–9
Ambient	-15 to 70 °C
Max. immersion	150 m
Duty	S1 (continuous)

SYSTEM LAYOUT



CONTROLLER



LED control panel — real-time monitoring & manual speed

CONTROLLER SPEC

Drive	Sensorless FOC, pure sine-wave output
MPPT efficiency	>99%
Enclosure	IP66
Mount	Both
Display	V / A / W / RPM / error
Remote monitor	Optional 4G / Wi-Fi module (add-on)

MATERIALS & CERTIFICATION

Standard	SUS304 impeller, diffuser, sleeve & shaft
Option	SUS316 wetted parts

CE	RoHS	CB	TUV	SGS	ISO 9001	ISO 14001
IP68	IEC 62253					