

Mono Pumps Computer Aided Solar Simulation

Quotation Number	EX-001
System Type	Sun Sub
System Size [w]	350
Array Type	Tracking
Country	United Kingdom
Location	PENZANCE
Latitude	50.10
Longitude	-5.30
Array Tilt Angle	50
Static Head [m]	35
Pipe Length [m]	40
Pipe Size	32mm Metric Class 12.5
Cable Length [m]	40
Cable Size [mm]	2.50
Water Temp [deg C]	25
% of Max Flow	100.0 %
MPPT Size	Series 1000 SMC
Motor Size	Series 1000
Pump Size	SM041
Drive Ratio	1.0
System Part Number	SS0350MA045T3

Typical Performance at 1000W/m ²	
Flow [L/min]	33.9
Friction Head [m]	3.4
Total Head [m]	38.4
Pump Speed	2635
Pump Efficiency	91%
Motor Efficiency	80%
Cable Loss	1%
System Efficiency	70%

Month	Daily Flow [m ³ /day]	Horizontal Irradiation
January	1.9	0.6
February	5.4	1.4
March	9.2	2.6
April	13.6	4.2
May	14.5	4.9
June	16.2	5.6
July	13.7	4.8
August	11.8	4.0
September	9.4	2.9
October	6.6	1.7
November	3.9	0.9
December	1.7	0.5
Average	9.0	2.8

Notes

Solar Example, 350w Borehole

