

SunWize® Power & Battery

Solar Water Pumping Kits (WPK) - Franklin Electric SubDrive



900-3000+W Solar

Top-of-Pole Mount

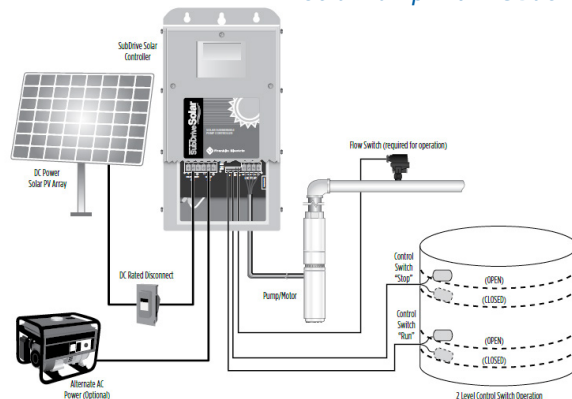
MidNite Combiner Box

SunWize Franklin Electric series Water Pumping Kits (WPK-FE) are complete solar kit packages that contain everything needed to run either SubDrive or Photon series SolarPak submersible pump systems from Franklin Electric. Both SunWize WPK-FE and Franklin Electric SolarPak systems are designed for high performance in remote and harsh environments. Our FE Series SubDrive WPK solar kits are sized according to Franklin Electric 0.75HP, 1.5HP, and 3.0HP motor sizes and will produce approximately **150 to 35,000 gallons per day** depending on pump model, Total Dynamic Head (TDH), WPK selected, and solar resources at the pumping location.



SunWize WPK-FE series solar kits use high quality 72-cell solar modules and durable Solar Rackworks top-of-pole mounts, rated for 90 mph wind speeds. Each WPK kit contains solar modules, rack and 30 ft. of MC4 cable for connecting the solar module to controller. Solar modules are 300-375W in size. All sizing calculations assume 315W module option.

Solar Pump with AC Backup



SolarPaks feature 4" submersible motor, pump, & Controller

SUNWIZE WPK-FE SERIES KEY FEATURES:

- Includes Everything Necessary to run SubDrive and Photon Series SolarPak Systems, up to 35k gallons/day
- High Quality 72-Cell Solar Modules w/ Aluminum Frame and MC4 Output Cables between 300W-375W
- Solar Rackworks Top-of-Pole Mounts - 90 MPH wind ratings, powder coated gimbals, 6061-T6 aluminum rails, & 0-60 deg. tilt angle, 130MPH version available

SOLARKPAK KEY FEATURES:

- IP65 & NEMA3 Drive Enclosure for Outdoor Use
- SubDrive Features AC Power Input for Generator
- Remote telemetry through RS-485 data port
- MPPT technology to maximize efficiency and power of the solar system
- Simple installation with no maintenance
- UL Approved

Technical Specifications

System Model	Module Options	Module Qty	Rack	Balance of Systems (all WPK)
270131- WPK-FE-945W	Solar Module availability is subject to change. Kits use premium 72-cell solar modules between 300W-375W. Module rating will not significantly affect estimated flow rates	3	TPR3-T21 (4")	1. 30 ft. MC4 Output Cable 2. MidNite MNPV 3P Outdoor Combiner Box MidNite 3. MNEPV 300VDC Din Rail Circuit Breaker
270132- WPK-FE-1260W		4	TPR4-T21 (6")	
270133- WPK-FE-1575W		5	TPR6-T21 (6")	
270134- WPK-FE-1890W		6	TPR6-T21 (6")	
270135- WPK-FE-2520W		8	TPR8-T21 (8")	
270136- WPK-FE-2835W		9	TPR9-T21 (8")	

Solar Rackworks Top-of-Pole Mounts Fit 2" to 8" Sch. 40 Diameter Pipe depending on model, shown in ()



Headquarters
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SunWize® Power & Battery Solar Water Pumping Kits (WPK) - Franklin Electric



SunWize WPK-FE Lookup Table / 0-200 Ft. Total Dynamic Head (TDH)

SunWize Age of Power Autonomy Franklin Electric		SunWize Water Pumping Kits - Franklin Electric					
		(GPD) - Winter (1.5 Sun Hours) / Summer (5.5 Sun Hours)					
Water Pump Model	TDH Feet	WPK FE-945	WPK FE-1260	WPK FE-1575	WPK FE-1890	WPK FE-2520	WPK FE-2835
019428 - Pump, 15SDSP-.75HP SubDrive SolarPak 15GPM, 0.75 HP	30	1,290 / 4,700	1,780 / 6,500				
019435 - Pump, 45SDSP-1.5HP SubDrive SolarPak 45GPM, 1.5 HP	30			3,480 / 12,700	4,050 / 14,800		
019437 - Pump, 90SDSP-1.5HP SubDrive SolarPak 90GPM, 1.5 HP	30			4,450 / 16,300	5,670 / 20,700	6,640 / 24,300	
019438 - Pump, 90SDSP-3.0HP SubDrive SolarPak 90GPM, 3.0 HP	30			4,940 / 18,100	6,480 / 23,700	8,740 / 32,000	9,720 / 35,600
019421 - Pump, 5SDSP-0.75HP SubDrive SolarPak 5GPM, 0.75 HP	60	520 / 1,900	720 / 2,600				
019423 - Pump, 7SDSP-.75HP SubDrive SolarPak 7GPM, 0.75 HP	60	720 / 2,600	1,050 / 3,800				
019431 - Pump, 25SDSP-1.5HP SubDrive SolarPak 25GPM, 1.5 HP	60			2,100 / 7,700	2,430 / 8,900		
019433 - Pump, 35SDSP-1.5HP SubDrive SolarPak 35GPM, 1.5 HP	60			2,510 / 9,200	2,990 / 10,900	3,400 / 12,400	
019434 - Pump, 35SDSP-3.0HP SubDrive SolarPak 35GPM, 3.0 HP	60			2,670 / 9,800	3,070 / 11,200	3,880 / 14,200	4,290 / 15,700
019436 - Pump, 45SDSP-3.0HP SubDrive SolarPak 45GPM, 3.0 HP	60			2,590 / 9,500	3,320 / 12,100	4,450 / 16,300	5,020 / 18,400
019438 - Pump, 90SDSP-3.0HP SubDrive SolarPak 90GPM, 3.0 HP	60				2,430 / 8,900	5,670 / 20,700	7,120 / 26,100
019425 - Pump, 10SDSP-.75HP SubDrive SolarPak 10GPM, 0.75 HP	100	680 / 2,500	1,130 / 4,100				
019428 - Pump, 15SDSP-.75HP SubDrive SolarPak 15GPM, 0.75 HP	100	810 / 2,900	1,450 / 5,300				
019431 - Pump, 25SDSP-1.5HP SubDrive SolarPak 25GPM, 1.5 HP	100			1,860 / 6,800	2,180 / 8,000	2,510 / 9,200	
019433 - Pump, 35SDSP-1.5HP SubDrive SolarPak 35GPM, 1.5 HP	100			2,020 / 7,400	2,590 / 9,500	2,990 / 10,900	
019435 - Pump, 45SDSP-1.5HP SubDrive SolarPak 45GPM, 1.5 HP	100			1,210 / 4,400	2,180 / 8,000	2,990 / 10,900	
019434 - Pump, 35SDSP-3.0HP SubDrive SolarPak 35GPM, 3.0 HP	100			2,180 / 8,000	2,670 / 9,800	3,640 / 13,300	3,960 / 14,500
019438 - Pump, 90SDSP-3.0HP SubDrive SolarPak 90GPM, 3.0 HP	100					1,940 / 7,100	4,050 / 14,800
019421 - Pump, 5SDSP-0.75HP SubDrive SolarPak 5GPM, 0.75 HP	130	440 / 1,600	640 / 2,300				
019423 - Pump, 7SDSP-.75HP SubDrive SolarPak 7GPM, 0.75 HP	130	600 / 2,200	930 / 3,400				
019428 - Pump, 15SDSP-.75HP SubDrive SolarPak 15GPM, 0.75 HP	130	320 / 1,100	1,290 / 4,700				
019429 - Pump, 15SDSP-1.5HP SubDrive SolarPak 15GPM, 1.5 HP	130			1,130 / 4,100	1,290 / 4,700	1,450 / 5,300	
019431 - Pump, 25SDSP-1.5HP SubDrive SolarPak 25GPM, 1.5 HP	130			1,530 / 5,600	1,940 / 7,100	2,260 / 8,300	
019432 - Pump, 25SDSP-3.0HP SubDrive SolarPak 25GPM, 3.0 HP	130			1,620 / 5,900	2,020 / 7,400	2,750 / 10,000	3,070 / 11,200
019434 - Pump, 35SDSP-3.0HP SubDrive SolarPak 35GPM, 3.0 HP	130			1,450 / 5,300	2,260 / 8,300	3,240 / 11,800	3,640 / 13,300
019436 - Pump, 45SDSP-3.0HP SubDrive SolarPak 45GPM, 3.0 HP	130				1,130 / 4,100	3,150 / 11,500	3,800 / 13,900
019421 - Pump, 5SDSP-0.75HP SubDrive SolarPak 5GPM, 0.75 HP	200	320 / 1,100	600 / 2,200				
019423 - Pump, 7SDSP-.75HP SubDrive SolarPak 7GPM, 0.75 HP	200	400 / 1,400	850 / 3,100				
019429 - Pump, 15SDSP-1.5HP SubDrive SolarPak 15GPM, 1.5 HP	200			890 / 3,200	1,130 / 4,100	1,290 / 4,700	
019432 - Pump, 25SDSP-3.0HP SubDrive SolarPak 25GPM, 3.0 HP	200			810 / 2,900	1,450 / 5,300	2,340 / 8,600	2,670 / 9,800

Seasonal Calculations:

Use the Approximate Min-Max Sun-Zone Calculations Shown to Determine Water Pumping Production During Winter & Summer Seasonal Periods.

****Gallons/Day Scales Linearly With Sunlight (3.5 Sun Hour Rate is Avg. between 1.5 & 5.5 Sun Hour Rates shown)**

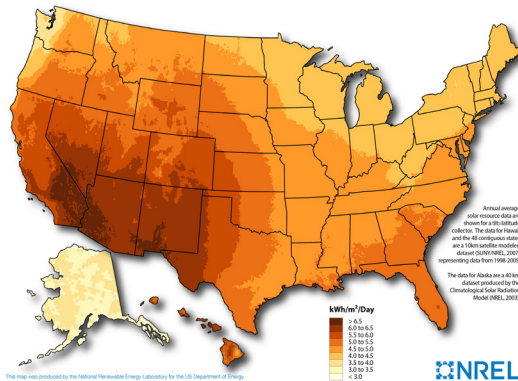
The top number is average winter daily pump production in gallons per day, assuming solar resources of 1.5 sun hours per day.

The bottom number represents average summer daily pump production in gallons per day, assuming solar resources of 5.5 sun hours per day.

We Can Optimize System & Provide Monthly Flow Rate Charts

--Have Questions?
--Don't See What You Need?
--Need A Custom System or a Smaller Flow Rate?
Call us at (866) 827-6527

Photovoltaic Solar Resource of the United States



Photon DC-Only Option Also Available

Lookup Instructions:

1. Determine System TDH Head ([click here](#))
2. Determine solar resources for site (see map, or use any solar resources database online)
3. Use Next Lowest TDH Head Grouping in Table
4. Scale Min/Max Gallons/Day per Step 2**
5. Choose System w/ Sufficient Gallons Per Day

Complete Order System Instructions:

1. (1) SolarPak Pump - Solar Pump Column
2. (1) WPK-FE - SunWize System Column

Headquarters

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SunWize WPK-FE Lookup Table / 200-1100 Ft. Total Dynamic Head

 		SunWize Water Pumping Kits - Franklin Electric					
		(GPD) - Winter (1.5 Sun Hours) / Summer (5.5 Sun Hours)					
Water Pump Model	TDH Feet	WPK FE-945	WPK FE-1260	WPK FE-1575	WPK FE-1890	WPK FE-2520	WPK FE-2835
019423 - Pump, 7SDSP-.75HP SubDrive SolarPak 7GPM, 0.75 HP	260		720 / 2,600				
019422 - Pump, 5SDSP-1.5HP SubDrive SolarPak 5GPM, 1.5 HP	260			400 / 1,400	480 / 1,700	640 / 2,300	
019429 - Pump, 15SDSP-1.5HP SubDrive SolarPak 15GPM, 1.5 HP	260			640 / 2,300	970 / 3,500	1,130 / 4,100	
019432 - Pump, 25SDSP-3.0HP SubDrive SolarPak 25GPM, 3.0 HP	260					1,940 / 7,100	2,340 / 8,600
019427 - Pump, 10SDSP-3.0HP SubDrive SolarPak 10GPM, 3.0 HP	300			560 / 2,000	720 / 2,600	1,050 / 3,800	1,210 / 4,400
019430 - Pump, 15SDSP-3.0HP SubDrive SolarPak 15GPM, 3.0 HP	300			560 / 2,000	890 / 3,200	1,370 / 5,000	1,530 / 5,600
019424 - Pump, 7SDSP-3.0HP SubDrive SolarPak 7GPM, 3.0 HP	330			560 / 2,000	680 / 2,500	930 / 3,400	1,010 / 3,700
019432 - Pump, 25SDSP-3.0HP SubDrive SolarPak 25GPM, 3.0 HP	330					1,290 / 4,700	1,940 / 7,100
019434 - Pump, 35SDSP-3.0HP SubDrive SolarPak 35GPM, 3.0 HP	330						810 / 2,900
019421 - Pump, 5SDSP-.75HP SubDrive SolarPak 5GPM, 0.75 HP	400		400 / 1,400				
019422 - Pump, 5SDSP-1.5HP SubDrive SolarPak 5GPM, 1.5 HP	400			240 / 800	360 / 1,300	560 / 2,000	
019426 - Pump, 10SDSP-1.5HP SubDrive SolarPak 10GPM, 1.5 HP	400			120 / 400	480 / 1,700	640 / 2,300	
019429 - Pump, 15SDSP-1.5HP SubDrive SolarPak 15GPM, 1.5 HP	400				400 / 1,400	810 / 2,900	
019432 - Pump, 25SDSP-3.0HP SubDrive SolarPak 25GPM, 3.0 HP	400						1,290 / 4,700
019422 - Pump, 5SDSP-1.5HP SubDrive SolarPak 5GPM, 1.5 HP	460			160 / 500	320 / 1,100	440 / 1,600	
019426 - Pump, 10SDSP-1.5HP SubDrive SolarPak 10GPM, 1.5 HP	460					560 / 2,000	
019427 - Pump, 10SDSP-3.0HP SubDrive SolarPak 10GPM, 3.0 HP	460				320 / 1,100	810 / 2,900	970 / 3,500
019430 - Pump, 15SDSP-3.0HP SubDrive SolarPak 15GPM, 3.0 HP	460					970 / 3,500	1,210 / 4,400
019424 - Pump, 7SDSP-3.0HP SubDrive SolarPak 7GPM, 3.0 HP	520			200 / 700	440 / 1,600	760 / 2,800	890 / 3,200
019427 - Pump, 10SDSP-3.0HP SubDrive SolarPak 10GPM, 3.0 HP	540					640 / 2,300	850 / 3,100
019430 - Pump, 15SDSP-3.0HP SubDrive SolarPak 15GPM, 3.0 HP	540					720 / 2,600	1,050 / 3,800
019422 - Pump, 5SDSP-1.5HP SubDrive SolarPak 5GPM, 1.5 HP	590					440 / 1,600	
019424 - Pump, 7SDSP-3.0HP SubDrive SolarPak 7GPM, 3.0 HP	620				240 / 800	680 / 2,500	810 / 2,900
019427 - Pump, 10SDSP-3.0HP SubDrive SolarPak 10GPM, 3.0 HP	790						400 / 1,400
019424 - Pump, 7SDSP-3.0HP SubDrive SolarPak 7GPM, 3.0 HP	820					440 / 1,600	640 / 2,300
019424 - Pump, 7SDSP-3.0HP SubDrive SolarPak 7GPM, 3.0 HP	1100						400 / 1,400

Seasonal Calculations:

Use the Approximate Min-Max Sun-Zone Calculations Shown to Determine Water Pumping Production During Winter & Summer Seasonal Periods.

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The top number is average winter daily pump production in gallons per day, assuming solar resources of 1.5 sun hours per day.

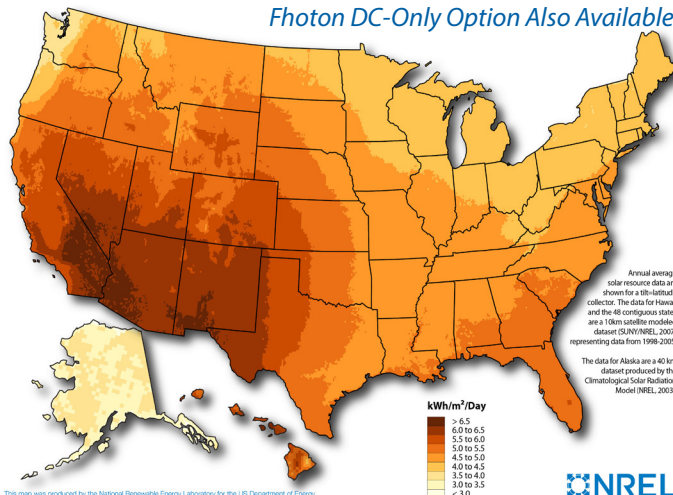
The bottom number represents average summer daily pump production in gallons per day, assuming solar resources of 5.5 sun hours per day.

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