

CEDAR

Smart Pumps. Reliable Water. Anywhere.



“Op die veld is taaieheid en
veelsydigheid van uiterste
belang en Cedar Pumps bied
dieselfde betroubaarheid vir
my plaas.”

Kwagga Smith

 **SPITFIRE**

 **CEVA**

 **MULTIFLOW**

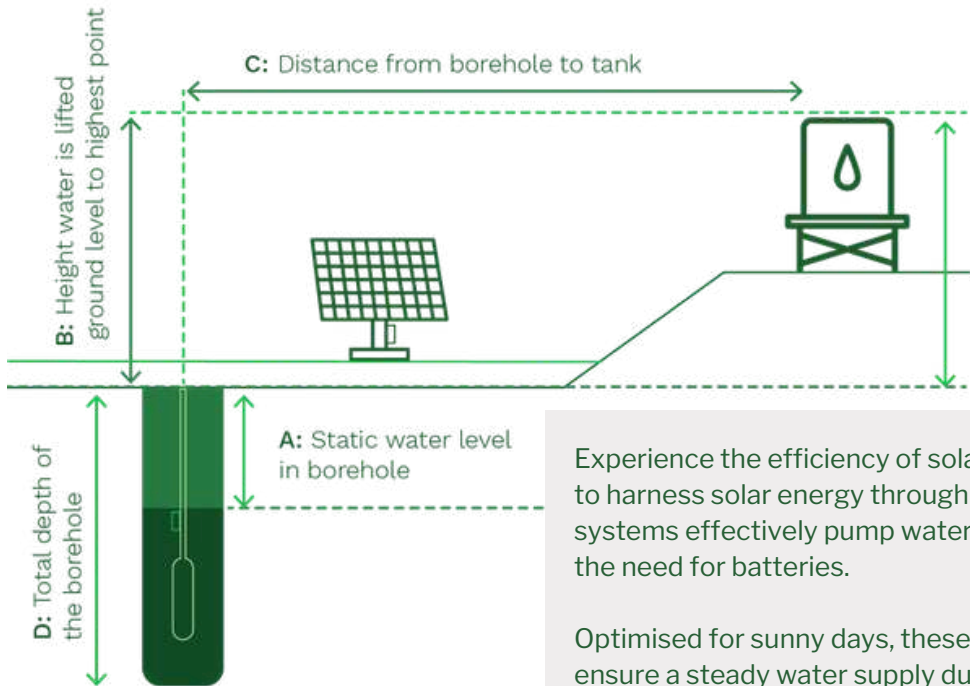
 **UNIFLOW**

VEICHI

011 794 4664
info@cedarsolar.com
www.cedarpumps.com



How Solar Pumps Work



Experience the efficiency of solar water pumps, expertly designed to harness solar energy through panels and a controller. These systems effectively pump water from boreholes or tanks without the need for batteries.

Optimised for sunny days, these pumps are specifically sized to ensure a steady water supply during the crucial 6 to 7 hours of daylight. A built-in sensor system helps maintain consistent water levels in your tanks, while the dry-run protection feature safeguards the motor in case of low water levels. It's a practical and eco-friendly solution for your water needs.

Accurate Sizing Software

Our advanced solar pump software is the key to accurately sizing our solar borehole pumps, ensuring optimal performance based on your borehole specifics and local weather conditions. By eliminating guesswork, it guarantees the most efficient and reliable solution for your water needs.

It leverages:

- Historical weather data for your site,
- Pump performance curves to match the best fit,
- Friction loss calculations for efficiency,
- Total dynamic head assessments to determine exact requirements.

This powerful integration delivers precise daily and annual water yield projections, allowing you to invest in the most effective system with confidence.

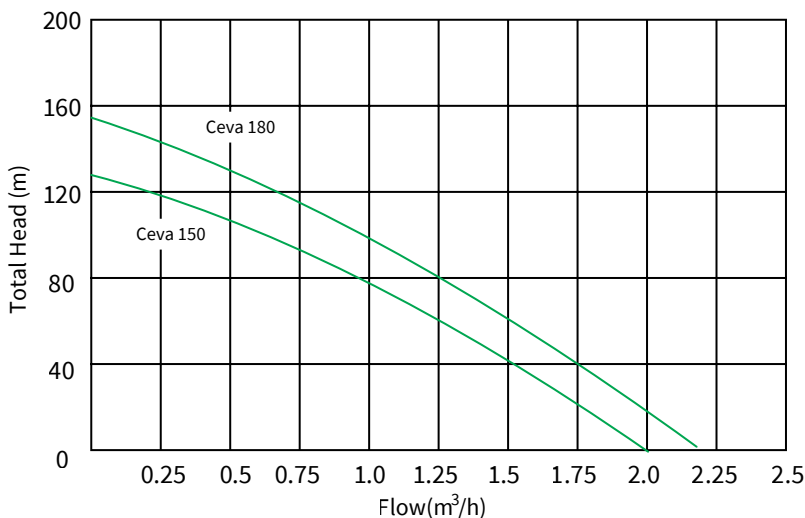
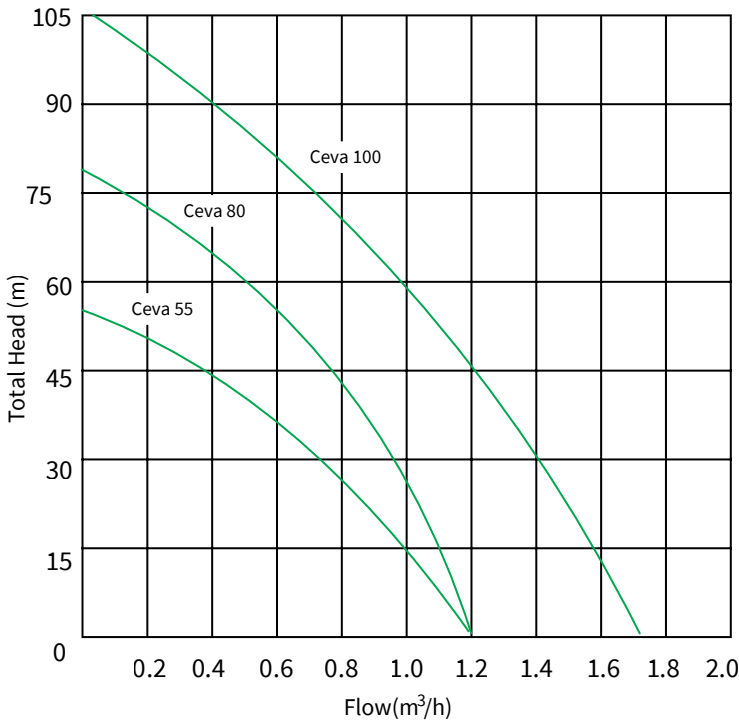







The Ceva2 DC pump range is designed with cutting-edge expertise to deliver exceptional performance for home and small-scale farming. With a focus on durability, efficiency, and reliability, Ceva pumps provide a superior water pumping solution backed by our industry experience. You can trust Ceva for:

- Unmatched reliability with a 2-year warranty.
- Expert in-house design, ensuring top-tier performance and quality.
- A durable oil-filled motor for long-lasting, efficient operation.
- Dry-Run Protection, safeguarding your pump against low-water conditions.
- Higher Voc limits for modern solar panel setups.
- Deeper installation depths compare to rival DC pumps



With Ceva, you're not just getting a pump -you're investing in quality, innovation, and peace of mind.

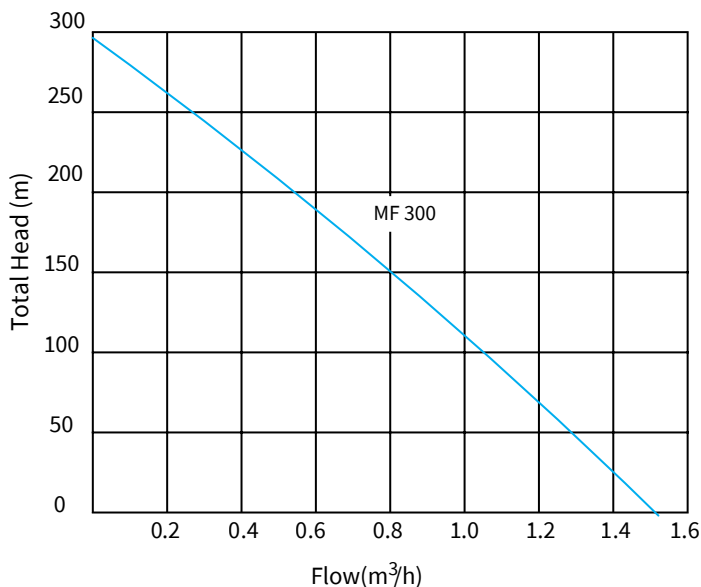
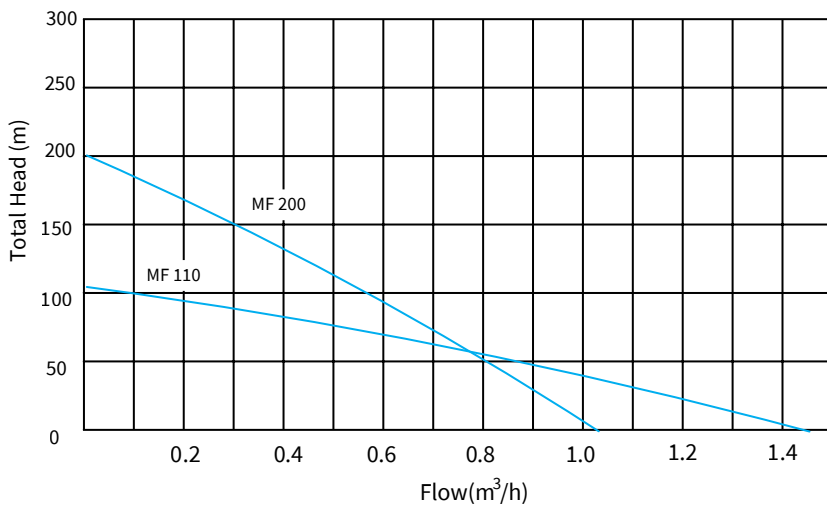





Pump Image					
Pump Model	Ceva 55	Ceva 80	Ceva 100	Ceva 150	Ceva 180
Type	Helical Rotor	Helical Rotor	Helical Rotor	Helical Rotor	Helical Rotor
Rating (W)	120	210	500	750	1100
Max Head (m)	56	77	109	125	155
Max Flow (m3/h)	1.2	1.2	1.7	2.0	2.2
Max Depth (m under water)	50	50	50	70	70
Optimal Volts (Voc)	48	48	90	90	120
Outlet (mm)	20	20	20	20	20
AC Input	Optional	Optional	Optional	Optional	Optional
Diameter	75	75	75	75	75
Height (mm)	420	420	420	420	420
Max Voltage (V)*	55	55	110	110	160
Min Voltage (V)	30	30	60	60	90
Max Current (A)	17	17	17	17	17
Controller	External	External	External	External	External
Well Sensor & cable included?	Yes	Yes	Yes	Sensor Only	Sensor Only
Recommended Dry Run Sensor	External (No internal sensor)	External (No internal sensor)	External (No internal sensor)	External (No internal sensor)	External (No internal sensor)
Warranty	2 Years	2 Years	2 Years	2 Years	2 Years
Example Panel Config	1 x 400 - 550w	1 x 400 - 550w	2 x 400 - 550w	2 x 450 - 550w	3 x 450 - 550w
Panel Connection (Parallel or Series)	-	-	Series	Series	Series

The Multiflow AC/DC range is a versatile and reliable solution, designed to work seamlessly with both DC (Solar PV) and AC (Grid and/or generator) power sources. Equipped with a brushless motor, these pumps ensure efficient water delivery - even when there's no sunlight.

Key Features:

- 2-Year Warranty for peace of mind. Upgraded controller for African conditions.
- True Hybrid Functionality, allowing effortless switching between solar and traditional power sources.
- Built-in Dry-Run Protection, safeguarding your pump from damage.
- Expandable solar capacity, with the ability to add solar panels in series up to 2800W, providing the flexibility to enhance power as needed.



Pump Image			
Pump Model	Multiflow Pen 110	Multiflow Duo 200	Multiflow Uno 300
Type	Centrifugal	Centrifugal	Centrifugal
Rating (W)	2200	2200	2200
Max Head (m)	110	200	300
Max Flow (m3/h)	15.8	10.5	1.5
Max Depth (m under water)	120	120	120
Optimal Volts (Voc)	200 - 430**	200 - 430**	300 - 430**
Outlet (mm)	50	50	32
AC Input	Yes	Yes	Yes
Diameter	90	90	90
Height (mm)	1120	1170	1320
Max Voltage (V)*	430	430	430
Min Voltage (V)	145	145	290
Max Current (A)	15	15	15
Controller	External	External	External
Well Sensor & cable included?	No	No	No
Recommended Dry Run Sensor	Internal	Internal	Internal
Warranty	2 Years	2 Years	2 Years
Example Panel Config	3-7 x 550w	3-7 x 550w	6 x 550w
Panel Connection (Parallel or Series)	Series	Series	Series

A Note on Pump Performance Curves

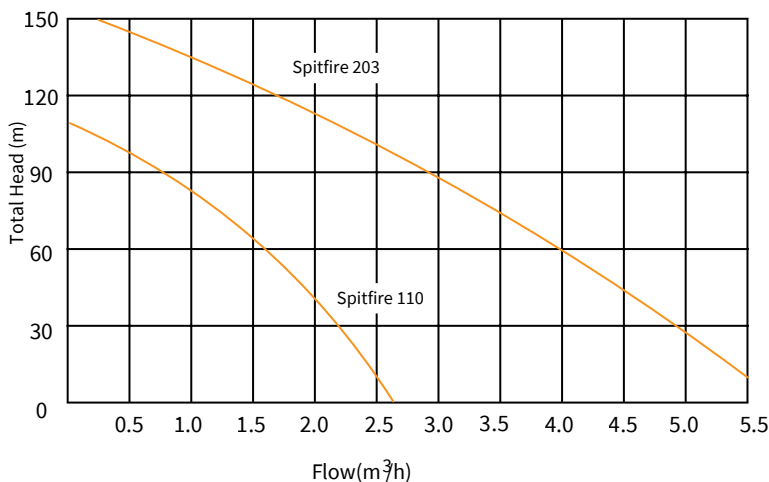
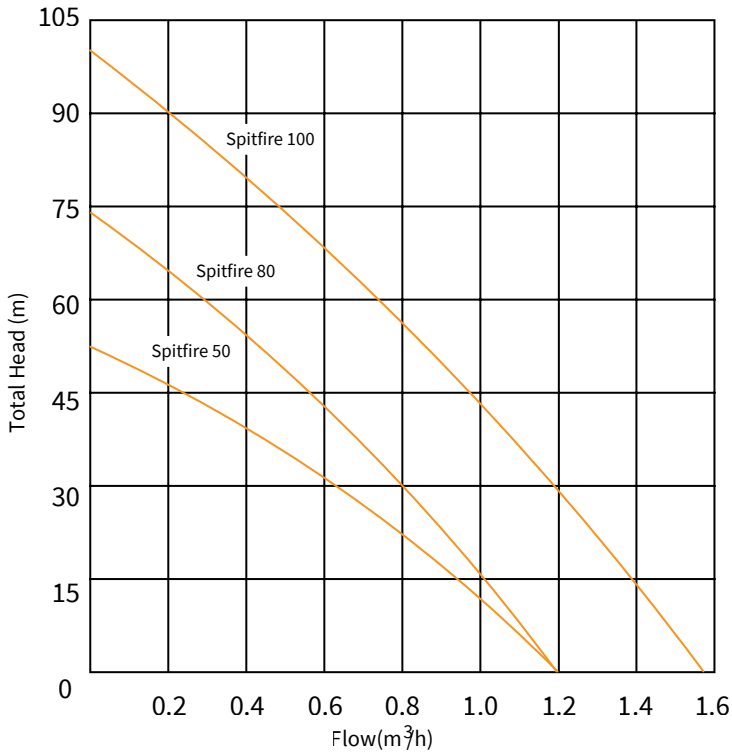
Pump performance curves are designed to represent optimal performance, adapting to various solar panel configurations, seasonal changes, and local weather conditions. However, actual performance may vary based on real-world factors. For a detailed and accurate assessment of pump performance in your specific setting, our online sizing software provides an interactive simulation. Tailored to your borehole characteristics and local climate conditions, it ensures you receive the most precise and reliable data to make informed decisions.






The Spitfire pump range is the perfect solution for home and small-scale farming, offering exceptional value without compromising on quality. Reliable, durable, and efficient - it's the go-to choice for those who need a dependable water supply.

Why choose Spitfire pumps?

- A durable oil-filled motor for long-lasting, reliable performance.
- Dry-Run Protection, safeguarding your pump from damage.
- Easy-to-configure solar panel setups.

With Spitfire, you get affordability, efficiency, and durability - all in one package.



Pump Image					
Pump Model	Spitfire 50	Spitfire 80	Spitfire 100	Spitfire 110	Spitfire 203
Type	Helical Rotor	Helical Rotor	Helical Rotor	Helical Rotor	Centrifugal
Rating (W)	120	210	500	750	1500
Max Head (m)	50	75	100	100	160
Max Flow (m3/h)	1.2	1.2	1.6	3.6	5.8
Max Depth (m under water)	25	25	25	40	40
Optimal Volts (Voc)	42	42	90	150	180
Outlet (mm)	20	20	20	25	32
AC Input	Optional	Optional	Optional	Optional	Optional
Diameter	75	75	75	90	90
Height (mm)	420	420	420	470	1100
Max Voltage (V)*	50	50	100	160	185
Min Voltage (V)	36	36	72	90	120
Max Current (A)	15	15	15	15	15
Controller	External	External	External	External	External
Well Sensor & Cable Included?	Yes	Yes	Yes	No	No
Recommended Dry Run Sensor	External	External	External	External Alt: Internal	Internal
Warranty	1 Year	1 year	1 Year	1 Year	1 Year
Example Panel Config*	1 x 300 - 455w	1 x 300 - 455w	2 x 300 - 455w	2 x 300 - 455w	4 x 300 - 455w
Panel Connection (Parallel or Series)	-	-	Series	Series	Series



VEICHI

Veichi Drive (VFD) systems are designed to efficiently convert DC power from solar panels into AC power, enabling seamless operation of AC motors. This conversion is crucial for deeper boreholes or high-water-demand applications that exceed the capacity of standard pump ranges. With these systems, you can power AC pumps directly with solar energy, delivering up to 120,000 litres of water per hour.

How it Works:

- The VFD system takes DC power from solar panels and transforms it into AC power using advanced inverter technology.
- This conversion enables seamless integration with AC motors, ideal for high-powered pumping applications.
- Designed for efficiency and reliability, it ensures consistent pump performance across a range of 0.37kW to 400kW.
- SI23 & SI30 models feature Hybrid Functionality, making them compatible with various power sources for added flexibility.



Model	Drive Rating (kW)	Max Motor Rating (kW)	Output Voltage	Phase	Max Input (Voc)	Optimal Range (Voc)	Enclosure	Rated Output (A)
SI21-D3-2R2G-A	2.2	0.75	220	1P	450	300-350	IP20	10
SI21-D5-5R5G-A	5.5	3	380	3P	780	620-750	IP20	13
SI23-D3-004G	4	1.5	220	1P	450	360-430	IP20	16
SI23-D3-5R5G	5.5	2.2	220	1P	450	360-430	IP20	20
SI23-D5-004G	4	3.7	380	3P	900	650-850	IP20	10
SI23-D5-5R5G	5.5	4	380	3P	900	650-850	IP20	13
SI23-D5-7R5G	7.5	5.5	380	3P	900	650-850	IP20	17
SI23-D5-011G	11	7.5	380	3P	900	650-850	IP20	25
SI23-D5-015G	15	11	380	3P	900	650-850	IP20	32
SI23-D5-018G	18	15	380	3P	900	650-850	IP20	38
SI23-D5-022G	22	18.5	380	3P	900	650-850	IP20	45
SI23-D5-030G	30	22	380	3P	900	650-850	IP20	60
SI23-D5-037G	37	30	380	3P	900	650-850	IP20	75
SI23-D5-045G	45	37	380	3P	900	650-850	IP20	90
SI23-D5-055G	55	45	380	3P	900	650-850	IP20	110
SI23-D5-075G	75	55	380	3P	900	650-850	IP20	150
SI23-D5-090G	90	75	380	3P	900	650-850	IP20	180
SI30-D5-004G-IR*	4	3.7	380	3P	900	650-850	IP65	10
SI30-D5-5R5G-IR*	5.5	4	380	3P	900	650-850	IP65	13
SI30-D5-7R5G-IR*	7.5	5.5	380	3P	900	650-850	IP65	17
SI30-D5-011G-IR*	11	7.5	380	3P	900	650-850	IP65	25

*Additional Programming Keypad Needed for SI30

Our UniFlow range of AC submersible pumps is built for performance and flexibility. They pair seamlessly with our Veichi VFD (Variable Frequency Drive) systems, allowing for smooth conversion to solar power - boosting efficiency, reducing energy costs, and enabling off-grid operation. But their use doesn't stop there.

These pumps are equally suited to homes and businesses with existing solar systems or grid power, offering a dependable AC solution without the need for a full system overhaul. Whether you're retrofitting an old pump or planning a new installation, our AC submersible pumps - on their own or with a VFD - deliver robust, eco-conscious performance.



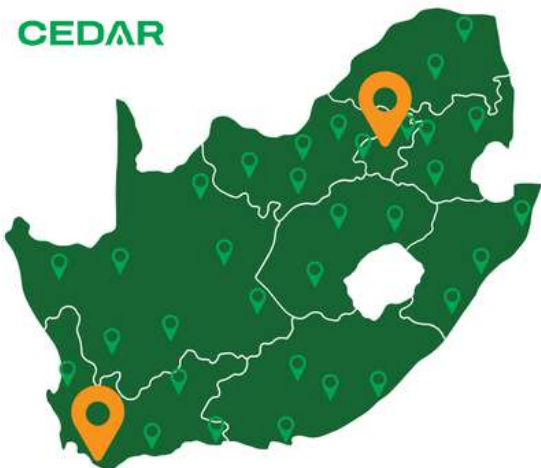
Available in motor sizes ranging from 0.37 kW to 30 kW, with matching wet-ends available.

Accessories

- DC Protection
- Pipe Fittings
- Cable Joint Kits
- Pump Spares
- Level Sensors
- Rope
- MC4
- Pre-Built Veichi Enclosures
- Solar Panels
- Mounting Structures
- Grizzly Groundmount
- Submersible Cable
- Baseplates
- Solar Cable



CEDAR



















Support Services

We're committed to providing comprehensive support for all our products, which is why we stock a full range of spares for every item in our lineup. To keep your equipment running smoothly and efficiently, we have repair workshops in Johannesburg and Somerset West, along with trusted repair partners in every province. Our skilled technicians are ready to handle any repair or maintenance needs, ensuring minimal downtime and maximum productivity for your operations.

What makes CEDAR different?

We're committed to providing comprehensive support for all our products, which is why we stock a full range of spares for every item in our lineup. To keep your equipment running smoothly and efficiently, we have repair workshops in Johannesburg and Somerset West, along with trusted repair partners in every province. Our skilled technicians are ready to handle any repair or maintenance needs, ensuring minimal downtime and maximum productivity for your operations.

													
Pump Image													
Pump Model	Spitfire 50	Spitfire 80	Spitfire 100	Spitfire 110	Spitfire 203	Ceva 55	Ceva 80	Ceva 100	Ceva 150	Ceva 180	Multiflow 110	Multiflow 200	Multiflow 300
Type	Rotor	Rotor	Rotor	Rotor	Centrifugal	Rotor	Rotor	Rotor	Rotor	Rotor	Centrifugal	Centrifugal	Centrifugal
Rating (W)	120	210	500	750	1500	120	210	500	750	1100	2200	2200	2200
Max Head (m)	50	75	100	100	160	56	77	109	125	155	110	200	300
Max Flow (m3/h)	1.2	1.2	1.6	3.6	5.8	1.2	1.2	1.7	2.0	2.2	15.8	10.5	1.5
Max Depth (m under water)	25	25	25	40	40	50	50	50	70	70	120	120	120
Optimal Volts (Voc)	42	42	90	150	180	48	48	90	90	120	200 - 430**	200 - 430**	300 - 430**
Outlet (mm)	20	20	20	25	32	20	20	20	20	20	50	50	32
AC Input	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Yes	Yes	Yes
Diameter	75	75	75	90	90	75	75	75	75	75	90	90	90
Height (mm)	420	420	420	470	1100	420	420	420	420	420	1120	1170	1320
Max Voltage (V)*	50	50	100	160	185	55	55	110	110	160	430	430	430
Min Voltage (V)	36	36	72	90	120	30	30	60	60	90	145	145	290
Max Current (A)	15	15	15	15	15	15	15	15	15	15	15	15	15
Controller	External	External	External	External	External	External	External	External	External	External	External	External	External
Well Sensor & cable included?	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes, sensor only	Yes, sensor only	No	No	No
Recommended Dry Run Sensor	External	External	External	External Alt: Internal	Internal	External (No internal sensor)	External (No internal sensor)	External (No internal sensor)	External (No internal sensor)	External (No internal sensor)	Internal	Internal	Internal
Warranty	2 Years	2 Years	2 Years	2 Years	2 Years	2 Years	2 Years	2 Years	2 Years	2 Years	2 Years	2 Years	2 Years
Example Panel Config	1 x 300 - 455w	1 x 300 - 455w	2 x 300 - 455w	2 x 300 - 455w	4 x 300 - 455w	1 x 400 - 550w	1 x 400 - 550w	2 x 400 - 550w	2 x 450 - 550w	3 x 450 - 550w	3-7 x 550w	3-7 x 550w	6 x 550w
Panel Connection	-	-	Series	Series	Series	-	-	Series	Series	Series	Series	Series	Series
Sub Cable	3 Core	3 Core	3 Core	4 Core	4 Core	3 Core	3 Core	3 Core	3 Core	3 Core	4 Core	4 Core	4 Core

*Exceeding the maximum voltage will damage the solar controller and void the warranty. Ensure panel voltage stays within controller specifications, regardless of panel type.

** Recommended Voc for best yields in all seasons 250 - 430V

