



Primehyd Solar Solutions

Prime Motion & Control

4/471 Victoria Rd, Malaga
Western Australia 6090

Phone: +61 8 9248 4144

Fax: +61 8 9248 7677

E-mail: info@primehyd.com.au

Remote data acquisition and system control is of paramount importance to the mining, oil & gas and many other industries. Having real-time information at your fingertips and remote control of your plant, reduces costs and increases personnel safety. Reliability, adaptability and design intelligence are essential in ensuring the best outcome.



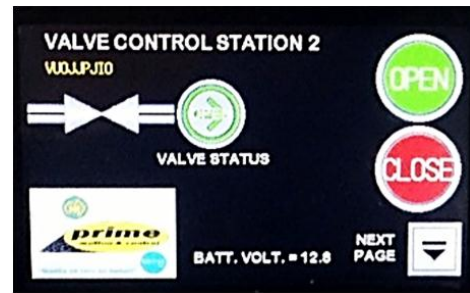
PrimeHyd SOLAR SOLUTIONS have designed and deployed remote systems that provide real-time, wireless data and valve actuation over hundreds of kilometers for major mining customers across the world. Harnessing the unlimited power of the sun, our remote telemetry systems can open and close any knife gate valve and provide you with virtually any kind of data feed; from a basic counter to a full-fledged control system with two-way communications.

Our hydraulic power units are run off a 12V battery which is solar charged and can reach a pressure of 200 bar and exert a maximum thrust of 157,000N on a 4" bore hydraulic cylinder. Ideal for 4" – 18" knife gate valves on tailings dams and remote off the grid areas. These power units can also be used for other applications like dams, gates and many more actuations.

Using state-of-the-art components, we design, build and commission every system to ensure maximum performance and reliability. We use only the best equipment, made to handle the conditions the system will operate in. To reduce the chance of incorrect installation and wiring during third party installation, which will inevitably destroy sensitive equipment, our remote systems are designed to be installed and activated through a simple 'plug-in, switch-on' process. Fully modular, instruments and control parts can be added and removed as needed – each

unit can be adapted to its new task without major redesigns, enabling faster deployment and lower asset overheads.

Remote telemetry has a number of benefits that will help your business operate with lower overheads and increased safety. No longer will distant sensors and instruments need to be read manually – meaning reduced risk to those travelling great distances to open or close a valve and record data. Furthermore, problems that may arise will display alerts within a matter of seconds rather than hours or even days, thereby preventing losses in materials and equipment.



Maintenance scheduling can also be managed with far greater accuracy. devices can automatically notify their need for servicing. The sun provides limitless energy, captured with one, two or as many solar panels as needed for your system. PrimeHyd SOLAR SOLUTIONS only uses quality panels that are made to last in the harshest environments.

With extensive experience managing solar powered systems, we provide reliable solutions that will keep your system on-line even in areas with little sunlight. All our designs are built from materials that will last in harsh environments. Fully stainless-steel systems can be provided or, if necessary galvanized and powder-coated mild steel can be used. Everything we build is IP65 rated and UV stabilised. Batteries are heat tolerant and sealed for maximum longevity. Our reputation for producing quality products that tirelessly provide benefits to our customers is what sets us apart. Meticulous research and the backup of the world’s finest producers of sensing equipment and instrumentation means our confidence is your confidence.

Technical Specification:

Item	Description
Power Pack	12v, 800 Watt, 100 Bar Max with manual override and hand pump. Provides 61500N retracted and 91500 extended force on the default 4” cylinder. Can be optimized to meet with individuals’ requirement
Enclosure	- Powder-coated steel, IP66 - Stainless Steel, IP66
Solar Panel Kit	80 Watt, 12v
Push Button Pendant	Provides easy operation of the actuator when the unit is not reachable
Battery	Deep Cycle, 36, 45, 60ah
PLC Unit	IDEC SmartAXIS, for automatic operation of the actuator
Wifi Communication	Only with PLC Unit
Home Base	Only with PLC Unit and Wifi

Cylinder Selection Guide:

Information in below table is calculated for an actuator with a 4” cylinder. Additional information will be provided upon request.

Stroke distance (Inches)	8”	10”	12”	14”	16”	18”	20”	24”
Opening-Closing time (seconds)	16-18	20-25	24-30	28-35	32-40	36-45	40-50	44-55
Minimum open/close cycles (36ah battery)	12	10	8	7	6	5.3	4.8	4

For your next remote telemetry and solar powered systems talk to PrimeHyd SOLAR SOLUTIONS. When precision and quality matters, we deliver.