

# BUSCH

Off-grid valve drive system

## WIRELESS POWER MASTER



Do you want to add automation, monitoring or remote control functionalities to your facility but don't have direct access to the electricity network?

We have the solution:  
The off-grid valve drive system

**WPM**  
**WIRELESS**  
**POWER MASTER**

Do you want to add automation, monitoring or remote control functionalities to your facility but don't have direct access to the electricity network?



To this day, providing these functions in conventional facilities still involves significant expenditure in terms of personnel and time. Thanks to the WPM grid-independent valve drive system, you can now conveniently monitor, configure and control your facility from any location and with fewer personnel.

#### Possible areas of application

- Storm water storage basins
- Retaining weirs
- Pumping stations
- Wastewater treatment plants
- Flood control
- Water pollution control



Eliminate your dependence on the power grid. Choose where to base your process control system. WPM is the solution.

**WPM** is an autonomous valve drive system that operates independently of public power and information networks.

**WPM** is a location-independent valve remote control system that incorporates remote monitoring functionalities.

**WPM** generates its own energy from photovoltaic cells and/or wind power.

**WPM** guarantees permanent monitoring of your facilities while also providing your control room with access to basic functions at all times.

The valves used in flood control systems, storm water storage basins or long-distance pipelines are increasingly automated. The aim is to allow remote operation of these facilities from a control room and to ensure that information regarding the current status of the valves is constantly available. In areas where no connection to the public energy network is available, this involves significant excavation and connection costs.

But with WIRELESS POWER MASTER, you can implement power supply, remote control and status information functionalities without incurring the associated connection costs.

For safety reasons, permanent monitoring of these facilities and constant access from control room to the facilities must be guaranteed. Thanks to the intelligent sensor system, you can conveniently monitor, configure and control your facility from any location and with fewer personnel. Permanent data storage functions offer security against data loss.

All physical circumstances can be monitored remotely, thus ensuring that the facility reacts as required. You determine which statuses are monitored, for example, the rate of flow, the fill level or the degree of mineral oil contamination.

In addition, the WPM system is capable of self-monitoring. All system data such as temperature and voltage are constantly monitored and entered into each report log.



## Enhanced performance and reduced costs

The WPM system eliminates expensive excavation, connection and energy supply costs.

Even if you have to install only 100 meters of a power supply cable it will pay off to purchase the WPM.

Don't hesitate. Ask for a cost comparison today!



## Environmentally friendly energy generation

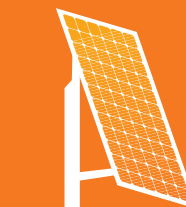
Powerful photovoltaic modules and / or wind power guarantee your essential supply of energy even if you are located a long distance from the power grid. WPM converts the sun's energy into the electric current to power your drive system.

The energy required is generated by a solar panel or a wind generator and stored for long periods in high-performance batteries. This stored energy will be converted on demand to 230 V three-phase alternating current to power the valve drive system.

This allows the use of standard electric drive systems. An efficient energy management function in the WPM controls the energy available to your best advantage. You can rest assured that ample reserves of power are available at all times for your critical applications.



Save time and money when monitoring your valves.



## Let WPM monitor and control your valves

### WPM monitors itself around the clock.

If an event occurs, the WPM immediately executes a counteractive routine. An event is simply an anticipated status that is specified by you. Examples include a level that may have been exceeded or contamination of a medium. This triggering event and the subsequent reaction to it are specified by you.

### Keep tabs on your facility around the clock.

You can check your WPM via SMS sent from your mobile phone. The current status appears on your screen. You can also use your mobile phone to execute the basic WPM functions. In the BASIC version, you can check your facility on-site later on.

### WPM monitors your facility remotely via SMS.

If an event predetermined by you should occur, a message is sent by e-mail or SMS to an e-mail address previously specified. Alternatively, a SMS can be sent to a specific mobile phone number.

WPM monitors and controls your facility via the Internet.

From any available Internet connection, you can view the current data for the WPM either in graphical or tabular form. You can also click on a button to access the remote control functions for your facility.

Any questions? We would be delighted to help.  +49 911-46254-0

### WPM – BASIC

Protects your facility by providing permanent monitoring and an automated response to any disturbances detected by the facility. Ideal for use in storm waste storage basins.

### WPM – COMFORT

If necessary, you can even monitor your facility via SMS. Your WPM can be relied on to inform you of any disturbances, wherever you happen to be.

### WPM – PREMIUM

You can avail of useful aids such as sensors and switches to monitor your facility. Internet connectivity provides you with data visualisation options – making sure that the current facility status and all performance data is always at your fingertips.

## Tailored to your requirements.

	WPM BASIC	WPM COMFORT	WPM PREMIUM	
Automatically monitors your facility	✓	✓	✓	
Automatically controls your system acc. to predetermined protection routines	✓	✓	✓	
Protects your area of responsibility and saves costs	✓	✓	✓	
Two programmable routines for responding to malfunctions	✓	✓	✓	
On-site-control	✓	✓	✓	
Informs you via SMS or e-mail on the current status your facility		✓	✓	
Control the facility yourself via SMS		✓	✓	
Includes four sensors for event monitoring		✓	✓	
Informs up to four recipients via SMS or e-mail			✓	
Remote control possible via Internet connection			✓	
Includes up to six sensors for event monitoring			✓	
On-screen graphical display of all current facility statuses			✓	



Choose your WPM variant.  
You can upgrade your WPM  
at any time.

## Technical details of the WPM off-grid valve drive system.

Power generation	Fully autonomous, available with photovoltaic and / or wind generator
Control	Manual on-site or remote control of your facility
Datcommunication	In GSM networks via SMS or e-mail
Data backup	All registered events are automatically saved
Sensor system	Depending on specifi cation, sensors 4-20 mA or switches
Alert messages	To predetermined numbers e.g. control room, emergency call, police etc.
Energy conversion	24 Volt / 3 x 230 Volt~
Drive system	Three-phase alternating current 3 x 230 Volt~
Security	Protected against unauthorized operation by double cut-off function
Environment protection	This system complies with current environmental protection standards



BÜSCH is ISO 9001 certified.



Member of „Deutschen Vereinigung für Wasserwirtschaft, Abwasser und Abfall e.V.“



Member of „Deutschen Verein des Gas- und Wasserfaches e.V.“



Member of „Warenzeichenverband Edelstahl Rostfrei e.V.“



Member of „Hochwasser Kompetenz Centrum e.V.“

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