



Supumps WeChat Official Account

中国代表处

舒朋士环境科技（上海）有限公司
地址：上海市杨浦区国宾路36号1506室
电话：021-54737855
邮编：201200

中国工厂及研发中心

舒朋士环境科技（常州）股份有限公司
地址：江苏省常州市武进区景德西路399号
电话：0519-85258081
邮编：213166

China Office

Supumps Environmental Technology (Shanghai) Co.,Ltd.
Add: Room 1506, No. 36 Guobin Road, Yangpu District, Shanghai, China
Tel: 86-21-54737855
Zip: 201200

China Factory And China R&D Center

Supumps Environmental Technology (Changzhou) Co.,Ltd.
Add: NO.399, Jingde West Road, Wujin District, Changzhou, Jiangsu
Tel: 86-519-85258081
Zip: 213166

For More Business Inquiries: 400-680-2108 | Visit: www.supumps.com.cn

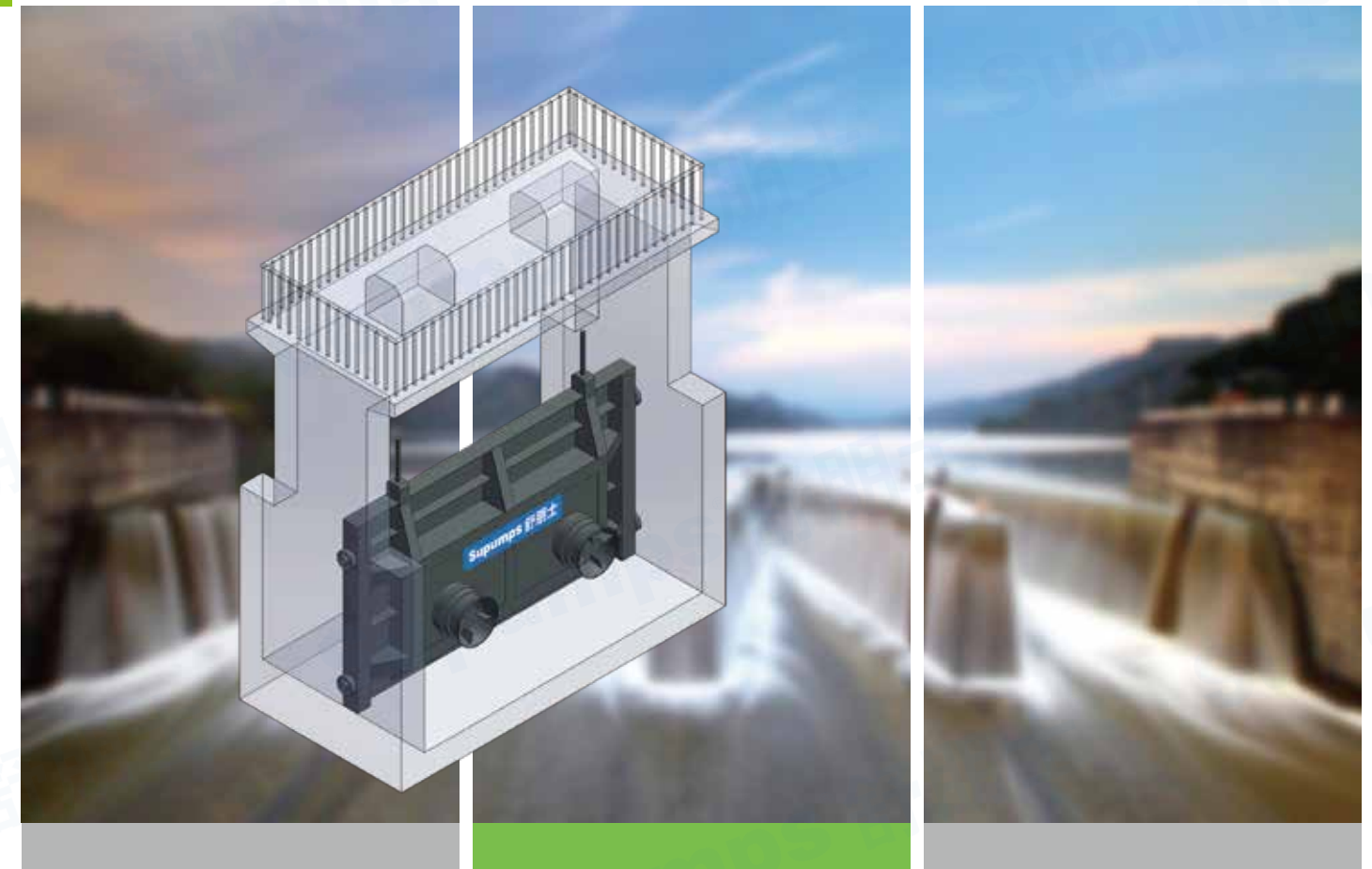
www.supumps.net P/N:32005206 2th Edition, June 2021

Supumps® 舒朋士®

Stock Code: 873161

Supumps Integrated Pump Gate **PUMPGATE™**

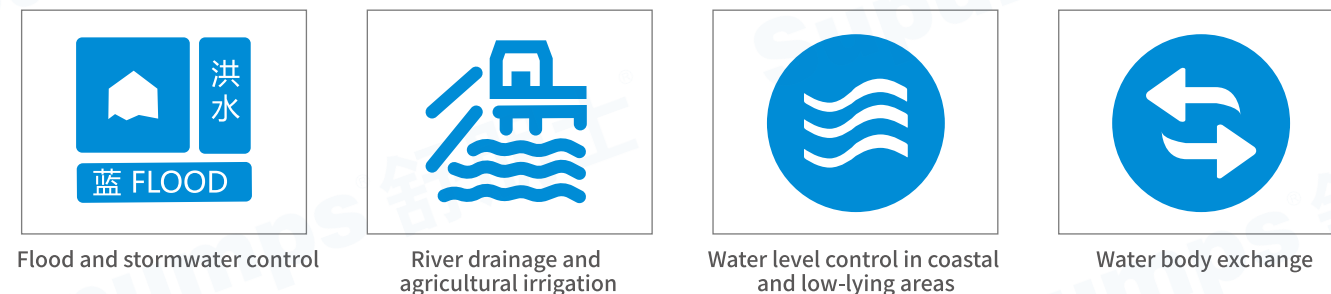
Integrated Solution for Flood & Waterlogging
Mitigation and River Remediation



Features of the Integrated Pump Gate

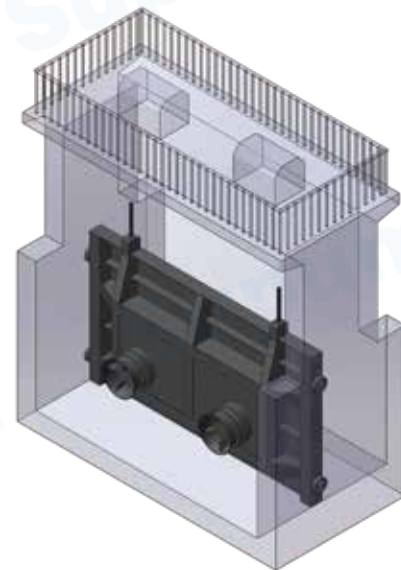
- **Compact structure, space-saving and cost-effective**
The integrated pump gate adopts a market-leading compact design, effectively reducing the overall footprint of the pumping station and saving construction land. It is available in various models for a wide range of applications, featuring easy installation, shortened construction periods, and reduced civil engineering costs.
- **Robust structure, reliable quality**
Constructed from cast iron or stainless steel for long-lasting durability. The design leverages the sturdy frame of the sluice gate, with the submersible pump directly mounted on the gate to form an integrated pump-gate structure, ensuring safety and reliability.
- **Intelligent monitoring, safe and convenient operation**
The system includes the sluice gate, submersible pump, and a complete control system. Unlike traditional pumping stations, the intelligent monitoring system enables real-time monitoring of both the gate and pump, ensuring the safety and high efficiency of the pump gate.

Application Scope

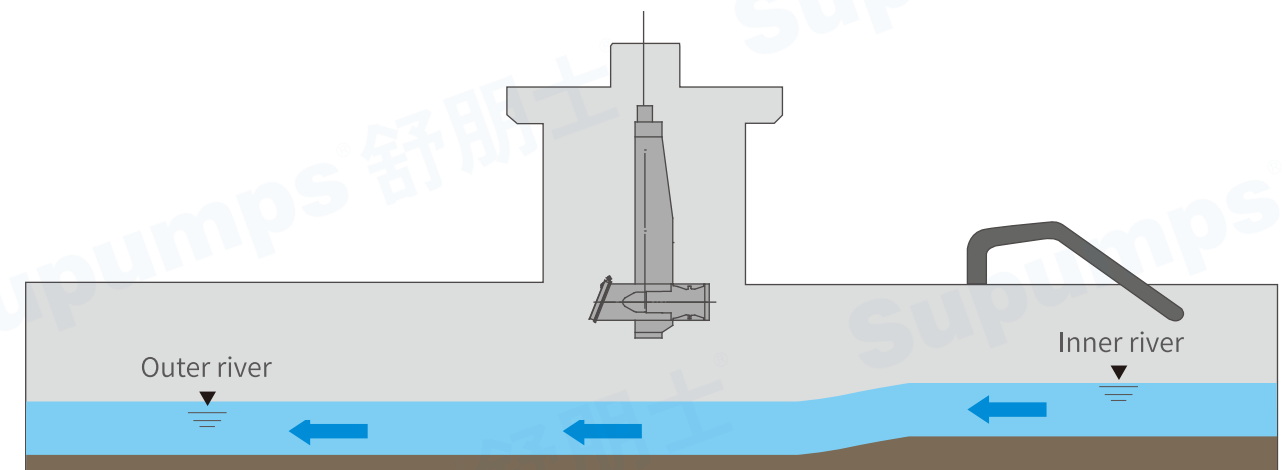


Design Parameters of the Integrated Pump Gate

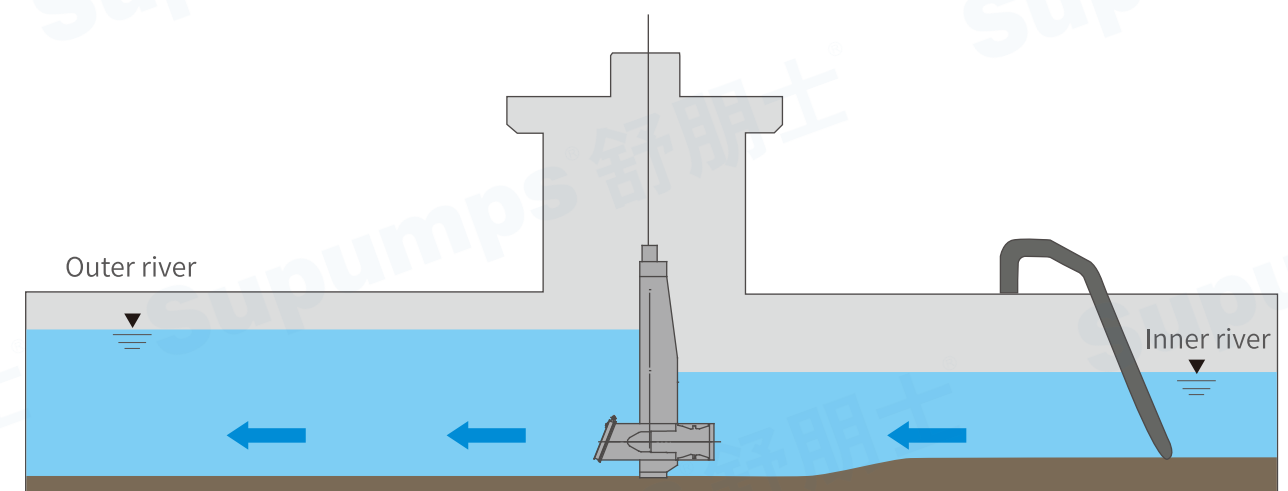
- Flow (Q): Max. 18,000 m³/h
- Head (H): Max. 5.5 m
- Pump diameter: 400 mm – 1,400 mm
- Insulation class: F
- Maximum installation depth: 20 m
- Maximum hydraulic efficiency: 88%
- Installation method: Vertical or horizontal



Working Principle of the Integrated Pump Gate



Inner river water level > Outer river water level



Inner river water level < Outer river water level

- The integrated pump gate and flap gate open automatically, allowing water to discharge from the inner river to the outer river by gravity.
- The integrated pump gate and flap gate close automatically to prevent backflow. When the inner river water level reaches the pump start level, the pump activates automatically to forcibly discharge water from the inner river to the outer river.

Traditional Pump & Gate



Typically, sluice gates and pumping stations are arranged separately: a sluice gate is installed at the midpoint of the river cross-section, with pumping stations located on one or both sides of the gate.

Cost Comparison Table

Overview / Item		Traditional Pump Station		Integrated Pump Gate	
Pump Type		Vertical		Vertical	Horizontal
Station Footprint		100%		50%	45%
Pump House	Required	Required		Not Required	
Sluice Gate		Required		Integrated with Pump Gate	
Civil Engineering Cost		100%		60%	60%
O&M (Operation & Maintenance) Cost		100%		80%	80%

Integrated Pump Gate

Space-saving
Footprint

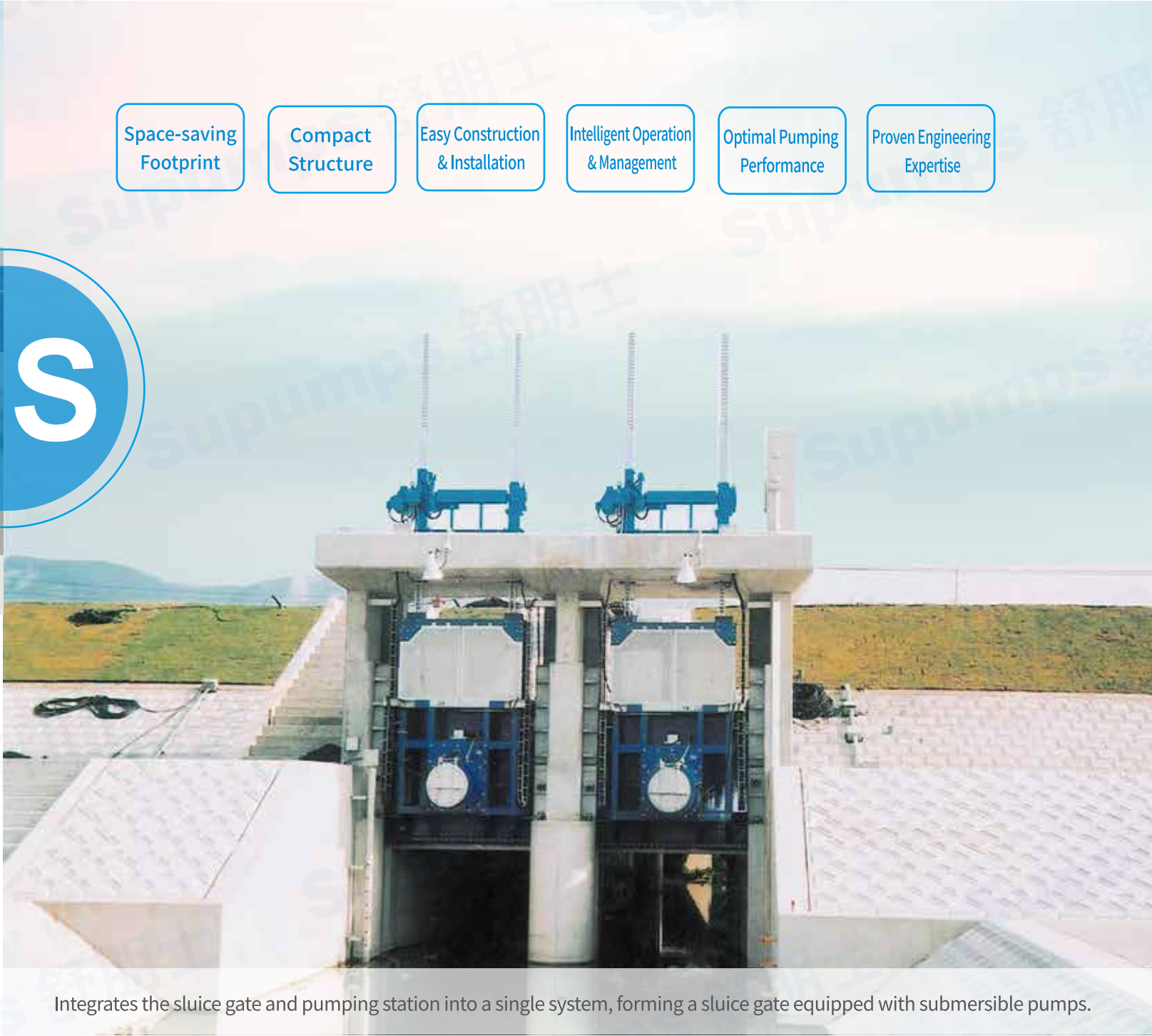
Compact
Structure

Easy Construction
& Installation

Intelligent Operation
& Management

Optimal Pumping
Performance

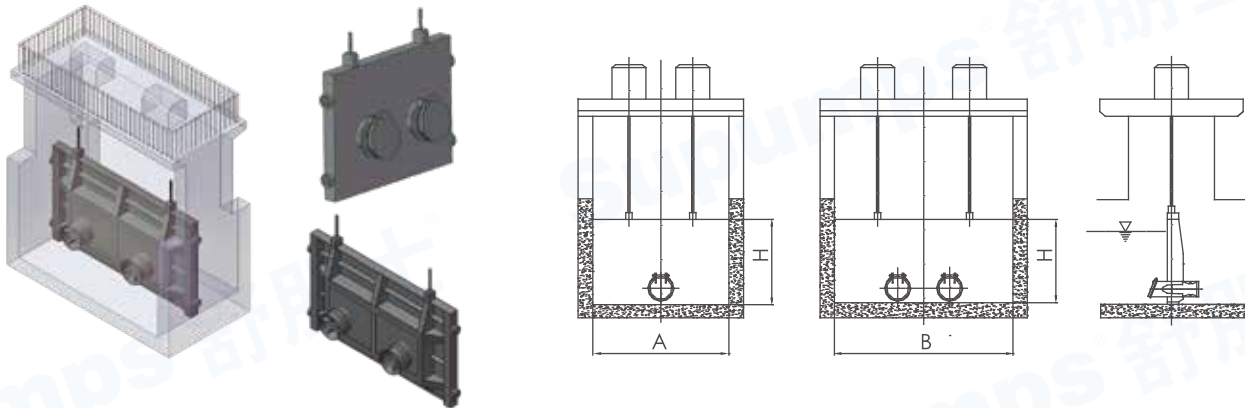
Proven Engineering
Expertise



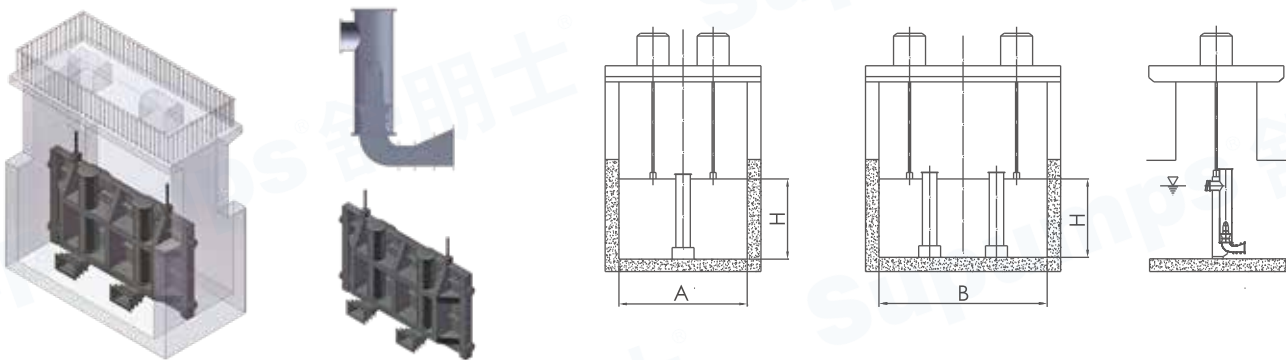
Integrates the sluice gate and pumping station into a single system, forming a sluice gate equipped with submersible pumps.

Installation Methods

Horizontal Installation



Vertical Installation



Intelligent monitoring system

Model	Diameter	1 Pump + 1 Gate		2 Pumps + 1 Gate		Rated Power (kW)
		Gate Size (A×H)	Flow (m³/min)	Gate Size (B×H)	Flow (m³/min)	
PG400	DN400	1.0×2.0m	28–36	2.0×2.0m	36–40	22–30
PG600	DN600	1.5×2.5m	36–50	2.5×2.5m	56–72	30–45
PG800	DN800	2.0×3.0m	70–90	3.5×3.0m	100–140	75–90
PG1000	DN1000	2.0×3.5m	115–130	4.0×3.5m	180–230	110–132
PG1200	DN1200	2.5×4.0m	150–200	5.0×4.0m	230–300	132–190
PG1400	DN1400	3.0×4.5m	200–255	6.0×5.0m	300–400	200–230

Intelligent Monitoring

- Supumps Integrated Pump Gate is equipped with a complete intelligent control system, providing full monitoring of pumps and valves, collection of water level and flow data, and interlocking control between different pumps to enable unmanned operation.
- Through the central control platform, you can monitor the pump gate operation status in real time, query historical data, perform data comparison, and generate various trend reports.
- SMS alerts and the WeChat Smart Water Platform provide users with real-time information, enabling reliable and efficient scientific management.



Intelligent monitoring system

Float Level Measurement



Liquid Level Sensor



Ultrasonic Level Measurement



Floor-standing Control Cabinet

Mobile Monitoring Architecture

