

CONTROL CABINETS FOR PUMPING STATIONS



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CONTROL CABINET FULL APP

- Easy to use and affordable
- Text display
- Alarms via SMS



CONTROL CABINET SAMBA

- Affordable
- Color touch display
- Remote control



CONTROL CABINET V-700

- Color 7" touch display
- With advanced features
- Remote control



CONTROL CABINET SCADA

- Display and controller according to customer's request
- Technical solution according to customer needs
- Compatible with existing remote management

Dear customer!

Thank you for taking time review our catalogue of control cabinets for pumping stations!

Here you will find information about control cabinets for pumping stations, options, choices, tips and how to use and maintain it safely.

During developing control cabinets for pumping stations the focus was their long-term durability and comfortable and safe use.

Control cabinets for pumping stations is intended for waste water or stormwater pumping stations to control the operation of pumps, to protect the motors of the pumps, monitoring, collecting information and transmitting it to service personnel.

Even the most demanding customer will find the suitable control cabinet for pumping stations from us.

In addition to STRONG pumping stations, our product range includes also pumping stations with submersible pumps, booster pumping stations, tanks, septic tanks and other products of the same brand.

Detailed information about all our products is available at the address www.iwsgroup.ee/en.



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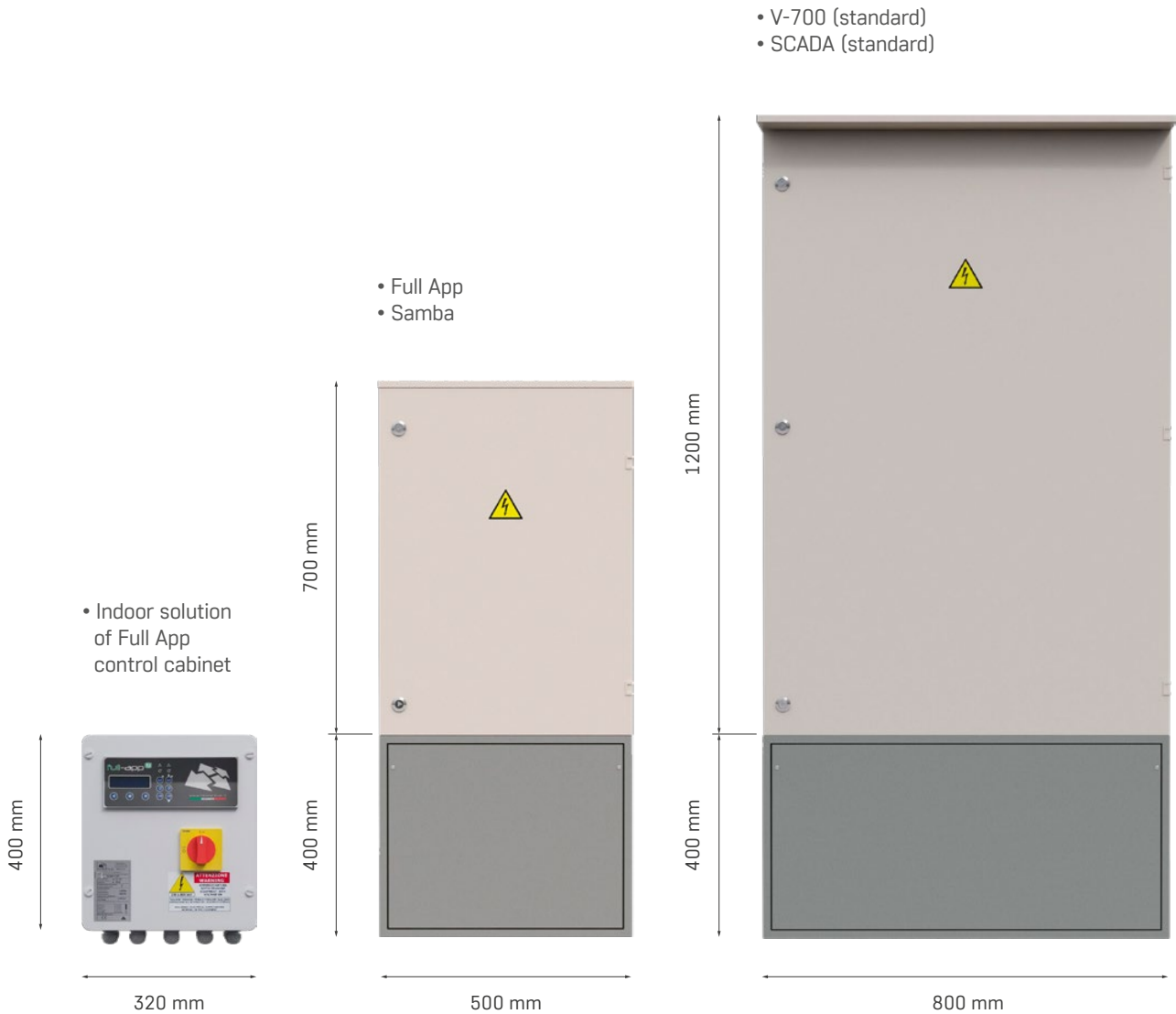
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DIMENSIONS OF CONTROL CABINETS

The control cabinet for pumping stations is located generally outdoors. For protection against weather conditions control cabinet will be installed to the steel shield (IP55), which is equipped with a thermostat and a heater. Shield of control cabinet made from hot galvanized sheet of steel, which is covered with weatherproof powder coating (color RAL7032).

The shield is equipped with mounting accessories: plinth, foundation base, keys, etc. Indoors the Full App control cabinet could be installed without steel shield.



CONTROL CABINET FULL APP

The Full App is an affordable and convenient way to monitor and control the operation of the pumps. The button-controlled display shows information about what's going on in the pumping station. In addition, automation also sends alarms via SMS – the easiest way to send alarms to service personnel or to the owner of pumping station. This is done by adding a modem to the control cabinet, setting alarms and entering the mobile phone numbers of the recipients of the alarms.

The Full App is also available without the ability to send SMS alerts. Such non-transmitting control cabinet is selected for locations where the operation of the pumping station is easy to control on an ongoing basis and possible failure of the pumps will not cause damage. Such control cabinets are generally located inside the building and equipped with a flasher or acoustic alarm.

Control cabinet Full App standard solution:

- For one or two pumps
- Pumps control with float switches
- Button controlled text display
- Automatic and manual control
- Main switch
- Phase control
- Work hours counter of pumps
- Start and stop counter of pumps
- Current and voltage measurement
- Alarm device with flasher or acoustic alarm

Extras for Full App control cabinet:

- Pump control with a hydrostatic level sensor
- Emergency control with two float switches
- SMS-alerts

Alarm messages:

- Pump 1 failure (temperature, overload, humidity)
- Pump 2 failure (temperature, overload, humidity)
- Water level high (drowns)
- Water level low (empty)
- Opening the control cabinet door
- Power supply failure / recovery



CONTROL CABINET SAMBA

Control cabinet Samba is the most affordable control system for remote monitoring and remote control. Information about what is happening in the pumping station can be seen on the color touch display on the inside door of control cabinet. The control panel display image also opens on the remote user's computer or smart phone display. Remote management allows you to fully monitor and control the operation of the pumps and to change the set parameters (e.g. water levels). Recorded data and graphs can be used to analyze the performance of pumps and what is happening at the pumping station. All alarms can be transmitted via SMS and e-mail. This kind of control cabinet is intended for an informed customer, who wants a sustainable remote control solution. This is a good alternative to SCADA remote management system. The great advantage is that the user does not need to invest to build up the SCADA system.

Control cabinet Samba standard solution:

- For one or two pumps
- Pumps control with a hydrostatic level sensor
- Emergency control with two float switches
- Automatic and manual control
- Color 4,3" touch display
- Main switch
- Phase control
- Work hours counter of pumps
- Start and stop counter of pumps
- Measurement of pressure from pumping station outlet
- Operating schedules of pumps (water levels, water pressure)
- Remote management
- SMS alerts
- Communication control (test signal)

Alarm messages:

- Pump 1 failure (temperature, overload, humidity)
- Pump 2 failure (temperature, overload, humidity)
- Pump 1 moisture
- Pump 2 moisture
- Water level high (drowns), from float switch
- Water level high (drowns), from level sensor
- Water level low (empty), from float switch
- Water level low (empty), from level sensor
- Opening the control cabinet door or pumping station cover
- Power supply failure
- High pressure in outlet pipe
- Battery low
- Pump 1 in manual mode
- Pump 2 in manual mode



CONTROL CABINET V-700

The V-700's control cabinet is with maximum capabilities, allowing everything from connecting the generator up to remote control. Information on what is happening at the pumping station is available on the 7-inch color touch display inside of control cabinet door. The control panel display image also opens on the remote user's computer or smart phone display. Remote management allows you to fully monitor and control the operation of the pumps and to change the set parameters (e.g. water levels). Recorded data and graphs can be used to analyze the performance of pumps and what is happening at the pumping station. All alarms can be transmitted via SMS and e-mail. This kind of control cabinet is intended for an informed customer, such as a waterworks and municipal company, who wants a remote control automation solution with maximum capabilities. This is a good alternative to SCADA remote management system. The great advantage is that the user does not need to invest to build up the SCADA system.

Control cabinet V-700 standard solution:

- For one or two pumps
- Pumps control with a hydrostatic level sensor
- Emergency control with two float switches
- Automatic and manual control
- Color 7" touch display
- Main switch / Re-switch
- Sockets 400 and 230 V
- Plug for generator
- RCD protection
- Phase control
- Surge arrester
- Work hours counter of pumps
- Start and stop counter of pumps
- Measurement of current and voltage
- Measurement of pressure from pumping station outlet
- Operating schedules of pumps (water levels, water pressure, currents, etc.)
- Remote management
- SMS alerts
- Communication control (test signal)

Extras for V-700 control cabinet:

- Measurement of the flow from the outlet
- Double power supply (RLA)

Alarm messages:

- Pump 1 failure (temperature, motor protection)
- Pump 2 failure (temperature, motor protection)
- Pump 1 overload
- Pump 2 overload
- Pump 1 underload
- Pump 2 underload
- Pump 1 moisture
- Pump 2 moisture
- Water level high (drowns)
- Water level low (empty)
- Opening the control cabinet door or pumping station cover
- Power supply failure
- Power supply recovery
- Overvoltage limiter activated
- High pressure in outlet pipe
- Low pressure in outlet pipe
- Battery low
- Pump 1 in manual mode
- Pump 2 in manual mode
- Dual power position (optional)
- Low water flow (optional)





CONTROL CABINET SCADA

This kind of control cabinet is for the customer who already has a remote management system (SCADA) and wants to add a new pumping stations to the monitoring system. The control cabinet is made according to the demands of the customer and as a rule they have a wide range of possibilities – allowing everything from connecting the generator up to remote control. Information on what is happening at the pumping station can be seen on the display on the inside of control cabinet door. Remote management allows you to fully monitor and control the operation of the pumps and to change the set parameters (e.g. water levels). Recorded data and graphs can be used to analyze the performance of pumps and what is happening at the pumping station. All alarms can be transmitted via SMS and e-mail. This kind of control cabinet is intended for an informed customer, such as a waterworks, who wants to add new pumping stations to an existing SCADA remote management system.

Control cabinet SCADA standard solution:

- For one or two pumps
- Pumps control with a hydrostatic level sensor
- Emergency control with two float switches
- Automatic and manual control
- Buttons control or touch display
- Main switch
- Sockets 400 and 230 V
- Plug for generator
- RCD protection
- Phase control
- Surge arrester
- Work hours counter of pumps
- Start and stop counter of pumps
- Measurement of pressure from pumping station outlet
- Remote management
- SMS alerts

Alarm messages:

- Pump 1 failure (temperature, motor protection)
- Pump 2 failure (temperature, motor protection)
- Pump 1 moisture
- Pump 2 moisture
- Water level high (drowns)
- Water level low (empty)
- Opening the control cabinet door or pumping station cover
- Power supply failure
- Power supply recovery
- Overvoltage limiter activated
- High pressure in outlet pipe
- Low pressure in outlet pipe
- Battery low
- Pump 1 in manual mode
- Pump 2 in manual mode

Extras for SCADA control cabinet:

- Measurement of the flow from the outlet
- Double power supply (RLA)

MAINTENANCE

MAINTENANCE PERSONNEL

Ensure that the requirements for working with electrical equipment are met when planning maintenance work. Maintenance personnel must have received appropriate training and be able to use the panel of control panel on the interior door hardware and operator panel. Electrical work may only be carried out by qualified personnel.

PURPOSE OF MAINTENANCE

The purpose of the maintenance work is to ensure the smooth operation of pumping station control cabinet. Maintenance work is carried out according to agreed maintenance schedule, but not less frequently than quarterly. When carrying out maintenance, the workplace must be prepared as required. Depending on the complexity of the operations, also involve and inform the control center personnel.

When performing maintenance work, check:

- earth contour, potential equalization and neutral line
- the existence and condition of electrical safety labels
- existence of control automation schemes in the document drawer
- the condition of the control, switching and interlocking devices
- the condition of the protective equipment and other electrical equipment
- identification of cables and wires
- condition of bolted joints
- the condition of the electricity meter
- the presence of seals
- the time is correct
- the condition of the heating system and the position of the thermostat
- battery condition
- the condition of the level sensor and float switches in the pumping station
- simulate, as far as possible, operational and emergency situations to control the operation of the apparatus
- modem operation

Once a year check the response capacity of all sensors. During the check, contact the control center and verify the correct transmission of alarms. After a power failure or repair, check the phase sequence. For longer power outages, switch on only shield heating before starting the pumps to ensure the required indoor climate in the control cabinet.



NB! Prolonged power failure can cause the control cabinet to malfunction, which may be caused by a lack of heating in the control cabinet.

During maintenance, defective parts are repaired or replaced. All information about the actual condition of the equipment is stored in the maintenance records.

WARRANTY

Innovative Water Systems undertakes the responsibility for the equipment's properties and for elimination of shortcomings becoming apparent during the equipment's use. The warranty terms stem from the legislation of the Republic of Estonia, and the warranty is first and foremost based on the manufacturers' warranties as long as they do not conflict with the laws of the Republic of Estonia. The warranty includes shortcomings of the equipment's or its individual elements' manufacture, materials or design.

1. General terms of warranty

1.1. The warranty is valid for 2 years i.e. 24 months in case of the product's purposeful use.

1.2. The warranty period starts from the product's handover date.

2. Warranty's validity terms

2.1. The prerequisite is the regulations in force and the installation and operation manuals required to be followed upon installation, use and maintenance of the equipment. The warranty will be valid if the equipment has been maintained regularly and used according to the manufacturer's instructions.

2.2 The warranty does not include damage caused to third parties because of a faulty product; it also does not include loss of revenue or any other similar loss.

2.3. In case of a fault becoming apparent, the equipment shall be repaired, not replaced as a whole.

3. The warranty does not include

3.1. training for installation, maintenance and use of the equipment;

3.2. repairs of transport damage and other mechanical damage (caused by vandalism, lightning, fire, etc.).

The warranty does not cover shortcomings caused by insufficient maintenance, incorrect installation and repairs, or normal wear. The warranty is also void if the equipment has been reconstructed.

