



Smart Solutions

## Water Infrastructure Management Controller

### Description

A dedicated hydraulic controller, specifically designed and developed to control hydraulic valves. The ConDor controller modifies the valve's setpoint by actuating two solenoid valves, replacing hydro-mechanical pilot valves.

This allows for the implementation of a wide range of hydraulic and non-hydraulic functions and combinations thereof.

Following 20 years of experience with our 1st generation ConDor controller and listening to our customer's requests, Aquestia is proud to present the next generation model, adding numerous new advanced features and more flexibility while maintaining the renowned simplicity and reliability of its predecessor model.

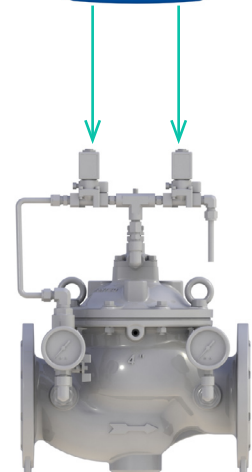
### Models

Product Name	Description
CND001017	ConDor v3 IP65 3G communication
CND001030	ConDor v3 IP65 4G communication
CND001015	ConDor v3 IP68 3G communication
CND001029	ConDor v3 IP68 4G communication
CND001023	ConDor v4 IP65 4G communication
CND001024	ConDor v4 IP68 4G communication

Model IP68



Model IP65



## Main Features

Retrofit and convert any pilot-operated valve into a smart valve	
Multi-function controller allows configuring of any hydraulic control function	<ul style="list-style-type: none"> <li>• Pressure-Management applications</li> <li>• Flow control</li> <li>• Level control</li> <li>• Mixing Junctions</li> </ul> <p>And many more</p>
Create hydraulic functions based on non-hydraulic input	<ul style="list-style-type: none"> <li>• Time</li> <li>• Temperature</li> <li>• Salinity (EC)</li> <li>• Chlorine level</li> <li>• Turbidity</li> <li>• Motion sensor</li> </ul> <p>And many more</p>
Allows defining up to 5 simultaneous control functions	<ul style="list-style-type: none"> <li>• Pressure reducing + sustaining</li> <li>• Pressure reducing + automatic excessive flow shut-off</li> <li>• Flow regulated</li> <li>• Level control</li> </ul> <p>And many more</p>
Fully dynamic set-value: modifiable by SCADA RTU, direct BLE control, follow preset profiles local changes in the input parameters, follow time of day, etc.	
Simple & reliable trim: 2 solenoid control trim is used for all hydraulic control functions and combinations	
Highly reliable, stable and accurate control	
Advanced, multi-channel, fully configurable data logger	<ul style="list-style-type: none"> <li>• Independent fixed or variable sampling rate per a channel</li> <li>• User-defined channels</li> <li>• FIFO memory function</li> </ul>
Configuration, control and monitoring are enabled above ground (when installed in a valve chamber), using an app on any mobile device with BLE communication	
Secure and safe: multi-tier user management system	

## Technical Specifications

<b>Power Supply</b>	12-24VDC Includes integral 12V battery charger	May use solar-panel or hydraulic generator as power source, protected against reverse polarity and short circuits
<b>Power consumption</b>	0.7 Watt standby 7 Watt momentary	
<b>Inputs</b>	4x 4-20mA 6x Digital 2x TTL frequency inputs optocoupled	
<b>Outputs</b>	2x 12VDC continuous solenoid valves 2x latching (pulse) solenoid valves 1x configurable alarm latching relay 1x configurable general-purpose latching relay	
<b>Communication</b>	Modbus RTU partner via RS485 short-range BLE with magnet operated security (wake-up) switch	5 channel Datalogger Frequency: min 1 sec. - max user defined Triggered by digital inputs or analog inputs Variable rate, user defined
<b>Enclosure</b>	Multi-colored LED May be supplied with a portable UI monitor & control device (HMI) OPC DA/UA	Heavy duty ASA, UV protected Environment temp.: -20° C to 60° C