

# TIC 12 - Tecnidro DC/AC Modular Backflush Controller



## DESCRIPTION

The TIC12 controller represent the new generation of well-known TIC backflush controller produced by Tecnidro since 2005.

This controller introduces new functionalities and an enhanced user interface to simplify the operation in field, parameter setting by rotary selectors, typical of TIC unit, has been kept also for the TIC12 model as it represents a very simple and immediate modality to set the main parameters of the device.

The units is provided with a large LCD display to immediately verify unit parameters and status, it is also provided a Bluetooth interface that allows to entirely manage the controller using a simple and intuitive APP.

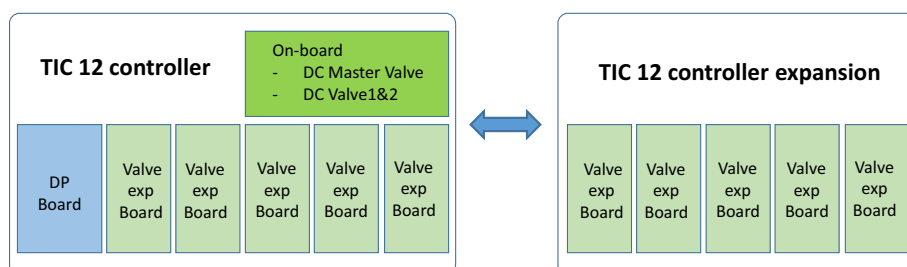
Moreover in the scenario of AGRICOLTURE 4.0 the controller can be equipped with a HYDRONET GPRS interface for the management of the device in a Cloud environment with remote notification of every operational status and parameters.

## MODULARITY

The TIC12 is a modular controller suitable to manage 1-12 stations DC or 1-10 stations AC in steps of two with expansion boards. Optionally, with a dedicated expansion board, the controller can be equipped with a differential pressure sensor.

In addition it is available an expansion TIC12 unit that can add up to n.10 stations to the main unit for a total of n.22 stations DC or n.20 stations AC

The basic DC version is already provided with built-in n.2 station valve control and master valve control. This configuration represents a cost effective solution for small system, the expansion capability, as above described, grant to the farmers the possibility to expand filtration system as needed and to adapt the Tecnidro controller also to very large systems.



TIC12 controller can be provided in different versions with LCD display or with Bluetooth module, already configured with a specific number of stations and also including the DP sensor, the latching solenoids ELBA and the 3-ways backwash valves available 2", 3" and 4" size

NOTE Rev.1.10:  
Technical characteristics may change without notice.

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<b>Outputs</b>	<p>Master valve (dedicated output for the DC version, available using expansion board port for the AC version)</p> <p>Station valves DC: 2 wires 12V DC latching solenoids AC: 24VAC solenoids</p> <p>Alarm output (open collector output) for local indication or third party devices notification</p>
<b>Inputs</b>	<p>Analog DP sensor (0 -2 bar / 0-30 psi) available as option with a dedicated expansion board</p> <p>Low pressure indication (digital input)</p> <p>External trigger (digital input)</p> <p>Water meter (pulse input)</p>
<b>Main settings</b>	<p>Main settings performed using rotary selectors 12 position</p> <ul style="list-style-type: none"> <li>- Flush interval</li> <li>- Flush time</li> <li>- Differential pressure</li> </ul>
<b>Additional settings</b>	<p>Additional setting using internal rotary switch or dip -switches</p> <ul style="list-style-type: none"> <li>- Valve delay</li> <li>- DP delay</li> <li>- Loop DP value</li> <li>- Master valve</li> <li>- Water meter</li> <li>- Measurement unit</li> </ul>
<b>Operation modalities</b>	<p>The flushing can be activated by different situations:</p> <ul style="list-style-type: none"> <li>- by time only ( flush interval)</li> <li>- by DP only (DP value)</li> <li>- by time and DP</li> <li>- by external input</li> <li>- manually</li> </ul>
<b>Display</b>	<p>Immediate indication of:</p> <ul style="list-style-type: none"> <li>- flush interval (set and left time until next cycle)</li> <li>- flush time (set and left time until successive station)</li> <li>- differential pressure set and actual value</li> <li>- station number</li> <li>- total number of cycles</li> <li>- water meter counter</li> <li>- alarms/status (battery level , low pressure, communication, consecutive cycles etc)</li> </ul>
<b>Communication</b>	<ul style="list-style-type: none"> <li>- I2C connection to the TIC 12 expansion unit for up to 10 additional valves</li> <li>- optional Bluetooth interface for controller management using a dedicated APP that can provide additional features and information</li> <li>- optional GSM/GPRS external communication module for In -Cloud management of the TIC12 controller with remote notificatio n of status and alarms to an In -Cloud server accessible via WEB</li> </ul>
<b>Operating range</b>	0÷+70°C
<b>Power supply</b>	<p>DC version: n.2 x 1.5V D type alkaline batteries 12 VDC power supply with external 220/110Vac adapter</p> <p>AC version: 24 VAC power supply with external 220/110Vac adapter</p>
<b>Material</b>	Waterproof IP 67 box, weatherproof ASA material with transparent polycarbonate lid
<b>Dimension and weight</b>	250 x 160 x 53 mm , approx. 1 kg

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