Hybrid Control Module

**1**

TECHNICAL

SPECIFICATIONS

The **Hybrid Control Module** is the newest addition to our growing range of **Innovative Control Systems.**

The **Hybrid Control Module** is the base of a range of intelligent controllers built on the same rugged and versatile technology that has made our Controllers the first choice of professional irrigation managers for 20 years, the Hybrid gives a highly functional Control System at a low cost.

The Hybrid Control Module can operate as a standalone Control System or can be configured as a networkable RTU with the addition of a simple plug in Communications Pack.

The Hybrid controller has advanced programming features, onboard diagnostic tools and allows for multiple fixed sensor inputs such as rain switch, pulse flow meter, pressure switch, level switch or soil moisture sensors.

A series of blind alarm inputs can also be used to pause an operating program once triggered, these can be connected to a variety of switching devices and other control panel outputs.

The Hybrid Control Module can be configured to work with the TWiN Decoder System and the RiC Solar Powered Wireless System, and also allows for various power input options, allowing for mains, DC or Solar DC multi-wire systems……, whatever the application there is a Hybrid Solution to fit your needs!

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| Typical Applications |
| * Municipal Park Irrigation
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| * Sports field Irrigation
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| * Golf Course Irrigation
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| * Landscape Irrigation
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| * Vineyard Irrigation
 |
| * Greenhouse Irrigation
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| * Agricultural Irrigation
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| * Remote Systems
 |
| * Starts Pumps
 |
| * Reads Pulse Meters
 |
| * Reads Rain Switch
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| * Reads Soil Moisture
 |
| * Reads Level/Depth Switch
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Hybrid Features

* Standalone or RTU
* SCADA Compatible
* Solar, DC or AC Powered
* 15 Standard Programs
* 6 Specialized Programs
* Up to 96 Zones
* Multi-Level Password on Keyboard
* Large Direct Access Keypad
* Large 4 line Daylight Screen
* Two Wire Option
* Syringe Cycle
* Filter Flush
* Fertigation
* IP67 Enclosure as standard
* Australian Made

**Electrical Specifications**

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| **Power Supply Options** | 24VAC 50/60Hz24VDC12VDC |  | **Fuse** | 3.15A on board fuse for power supply and relay output voltage |
| **Outputs** | Relay Outputs N/O 30VAC/VDC 3A Max3000VAC Isolation10ms contact settling timeCurrent sensing on relay bank |  | **Digital Inputs** | Close contact optically isolated inputs4VDC or up to 12mA (25mW) per input1600VDC isolation on the supplyPulse inputs:0.1 to 50 pulses per second10ms minimum pulse widthFrequency inputs:1 to 450Hz |
| **Communications** | 1 x RS485 Expansion Port1 x RS232 CCS Port2 x Configurable RS485/232 Ports |  |
| **Operating Conditions** | Temperature 0° to 75°CHumidity 5 to 95% non condensating |  | **Analog Inputs** | 4-20mA optically isolated inputsLoop or self-powered sensors24VDC loop supply1600VDC isolation on the supply |

**Networking Options**

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| **Network Protocols** | Open ProtocolDNP3MODbus |  | **Cellular Connect Options** | 3G/GSM M2M Modem3G/GSM Gateway Modem |
| **Central Control Capability** | RAINman Central ControlSCADA Based Systems |  | **Wireless Connect Options** | VHF RadioUHF Radio |
| **Direct Connect Options** | RS485Fibre Optic  |  | **Other Options** | Sat Link Modem/Router |

A large range of third party communications equipment is able to be integrated with the Hybrid Control Module, check the design guide for specifications.

**Control Output Options**

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| **AC Multi Wire** | 19-32VACMax 96 Stations |  | **TWiN Decoder Based Two Wire**  | TWiN DecodersTWiNcoil Combo Solenoid/DecoderMax 200 Stations |
| **DC Multi Wire** | 9-12VDC Latching, 150msMax 96 Stations |  | **RiC Remote Wireless** **Control** | 9-12VDC Latching, 150msMax 96 Stations |

Any mix of Control output methods can operate on a single Hybrid Control Module. TWiN System requires the addition of a TWiN Driver Module and Power Supply. RiC System requires the addition of a RiC Base and RiC Satellite Modules.