# **iGROW 1800 SERIES**

ADVANCED CONTROLLER SYSTEM



CS-1800-02-0422



### **CONTROLLER FEATURES**

STANDARD OUTPUTS	12
EXPANDABLE OUTPUTS	Up to 144
ZONES	1
MAX ZONES / NETWORK	64
MICRO ZONES	5 per zone
NUMBER OF ANALOG INPUTS	5 per zone
DIGITAL INPUTS	8
SET POINT PERIODS	8 (Dawn, Day, Night, Dusk, DIF 1-4)
MAXIMUM COOLING STAGES	6- Not Counting Aux Controls
MAXIMUM HEATING STAGES	6- Not Counting Aux Controls
MANUAL OVERRIDE SWITCHES	Yes
MANUAL OVERRIDE PROGRAM	Yes- for each output
PROGRAMMABLE AT PANEL	Yes
TEMPERATURE AVERAGING	6- Sensors per zone
ALARM NOTIFICATION	Yes
CLOUD PROGRAMMING	With LinkConn & Subscription
CLOUD DATA GRAPHING	With LinkConn & Subscription
CLOUD DATA REPORTING	With LinkConn & Subscription
CLOUD SECURITY & AUDIT	With LinkConn & Subscription
CLOUD GROW JOURNAL	With LinkConn & Subscription

### **DESCRIPTION**

Backed by unparalleled Link4 service and support, the iGrow 1800 offers remarkable flexibility and security, as well as a wide variety of advanced features to meet grower needs of all sizes.

Along with the standard control ability, the iGrow 1800 can handle the most complex control requirements for **indoor** and **greenhouse** facilities. Smart lighting, advanced irrigation, and custom configurations are some of the many advanced capabilities of this sensibly priced controller.

Combined with the new 1800 Cloud, the user has the ability to remotely control, monitor, report, add grower notes, and receive alarm notifications making growing easier and more successful.

#### **KEY FEATURES**

- Advanced capabilities to handle the needs of most complex indoor and greenhouse facilities.
- Expandable to 144 outputs and 64 zones for small to larger project requirements.
- Smart lighting functionality meeting both traditional and new lighting scheme requirments.

### **SUPERIOR CLOUD MONITORING & CONTROL**

- True phone app interface
- Control multiple sites and zones simultaneously
- Advanced alarm tracking and notifications
- Flexible user access assignment
- Audit tracking of all system changes
- Advanced reporting and detailed graphing
- New Grow Journal for tracking critical zone-specific crop data, issues, and required staff actions
- API interface available

### **GENERAL CONTROLLER INFORMATION**

CONTROLLER TYPE	Environmental / Irrigation	
PROJECT TYPE	Indoor / Greenhouse / Hydroponics / Vertical	
PROJECT COMPLEXITY Simple to Complex		
PROJECT SIZE	Medium to Large	

# "We Make Growing Easier"



## **SENSOR INTERFACE**

ITEM CODE	DESCRIPTION
990-0005-10	Weather Station - Series 1000
990-1034-00	ADISM Aspirated Sensor: Temp, Hum, CO2, Klux
990-0250-00	DigitalTemp & Humidity Sensor
990-0006-03	Temperature Probe - Air: Radiation sheild, 3-Wire
990-0006-01	Temperature Probe - Soil: Non-Threaded, 3-Wire
990-0006-00	Temperature Probe - Water: Threaded, 3-Wire
990-0002-00	Light Sensor- Solar: Klux (Intensity only)
990-0002-01	Light Sensor- PAR
990-7911-00	Anemometer: Wind Speed & Direction
990-7855-00	Optical Rain Sensor
990-7890-00	Barometric Pressure Sensor
xxx	Room Differential Pressure Sensor
xxx	Vent Position Sensor
990-7882-00	Soil Moisture Sensor: Measure Micro-Siemens



Integrate with the new 1800 Cloud to enhance your ability to view, control, report and receive alarms remotely.

# **EQUIPMENT INTERFACE**

ON / OFF COOLING	Pad Systems, Coolers, Fans
ON / OFF HEATING	Unit Heaters
HUMIDTY	Calculated, Dehumidifiers, Fog
C02	Yes
VENT MOTOR CONTROL	Ridge, Wall, Pad, Roll Up Walls
SHUTTER MOTORS / ACTUATORS	On / Off
CURTAIN MOTOR CONTROL	Yes - Shade, Blackout
BOILERS	Yes
PUMPS	Yes
SOLENOIDS	Yes
LIGHTING	HID, LED: On/Off, Supplemental, DLI (Daily Light Integral), Dimming, Dim to Off
MODBUS INTERFACE	Yes

## **PRODUCT SPECIFICATIONS**

ITEM CODE	DESCRIPTION	DIMENSIONS	WT
990-1800-00	iGrow 1800 Controller Standalone	xxxxx	xx
Contact Link4	Integrated iGrow 1800 Panel with Contactors, Expansion Modules, Sensor & Cabinet	Varies	Varies

# **SPECIALIZED CAPABILITIES**

CONTROL		
CONDITIONAL CONTROLS	User defined up to 128 variables	
POSITIVE PRESSURE CONTROL	Yes	
LIGHTNING PROTECTION	Yes	
VPD MONITORING	Yes	
VFD CONTROL	With ramping for pumps, fans, compressors	
SPRAY OVERRIDE	Temperature or post purge	
DIF CONTROL	Yes	
LIGHTING		
ON/OFF LIGHTING	HID, LED, Other	
SUPPLEMENTAL LIGHTING	Light level	
DLI CONTROL	Yes	
DIMTO OFF CONTROL	LED - with appropriate driver	
LED SPECTRAL TUNING	Based on 0-10 control	
IRRIGATION		
ON/OFF IRRIGATION	Yes	
CYCLICAL IRRIGATION	Yes	
MISTING / FOGGING	For humidification	
FLOOD / PULSE IRRIGATION	Yes	
INTELLIGENT IRRIGATION	With moisture sensor	
ACCUMULATED LIGHT IRRIGATION	Yes	
VPD IRRIGATION	Yes	

