



2009 Product Catalog and Specification Guide

Solar Power Systems

Wireless Flow Sensing

Lightning Protection

**Special Application
Engineering**

Solar Power Supplies



SPS systems are designed according to supply and demand criteria which include:

- Site location (average sun hours/day)
- Type of equipment being powered
- Total time of operation
- Amount of power (watts) being consumed
- Minimum 3 day battery reserve
- Meeting current NEC rules and regulations

Standard SPS Features:

- Powder coated aluminum enclosure
- Load & charge rated charge controller
- Battery bank with minimum 3 day reserve
- All wiring to meet NEC regulations
- PV panel (s) to capture solar energy based on Site Survey Form
- PV panel mounting brackets and hardware
- Mounting, Assembly, and Operating Instructions
- Equipment Grounding Kit

SPS for Irrigation Control

- Pure Sine-Wave Inverter for accurate data/time functions

SPS for other 120 vac applications

- Modified Sine-Wave inverter

Contact us at the phone number below for a **Solar Project Information Sheet**. You should fill this out before you specify a unit. We would be glad to assist you in the design and specification of your project and assembly. We can also help you with meeting national, state & local electrical code regulations.

A Solar Power Supply (SPS) is the answer to your challenge of a poor or non-existent electrical service. Why choose solar power over conventional power?

- Rising costs for meter drops
- Efficiency of today's solar technology
- 24 hour dependable power, no losses due to a power outage
- No monthly electrical bill
- Local public relations or Green Initiatives

Solar Power Supplies are a good power solution for:

- **Lighting**
 - Signs
 - Monuments
 - Park or common area pavilions
 - Sidewalks or Pathways
 - Landscapes with LEDs
 - Remote Driveways
 - Intersections
 - Mail box sites
 - Kiosks
 - Security lighting
- **Irrigation Controls**
 - Parks
 - Medians
 - Reclamation projects
 - HOA common areas
 - Remote sites
- **Light Industrial**
 - DC pumps
 - Security cameras
 - Remote site power
 - Portable & backup power



Note: All Solar Power Supplies are custom designed to the power requirement of each application. Please fill out the Solar Project Information Sheet on the next page to obtain the quote for your application.



Solar Project Information Sheet

Project Information

Name of Project: _____ Date ____ / ____ / ____

Address _____ City _____

State _____ Zip _____ Phone () - Fax () -

Owner of Project: _____

Address _____ City _____

State _____ Zip _____ Phone () - Fax () -

General Contractor: _____

Address _____ City _____

State _____ Zip _____ Phone () - Fax () -

Installation Contractor: _____

Address _____ City _____

State _____ Zip _____ Phone () - Fax () -

Anticipated Date of Installation: ____ / ____ / ____

What is to be powered by solar power supply: _____

Irrigation

What controller is being used? _____

What is the maximum daily run time hours in July? _____

How many run days per week? _____

Is there a master valve or pump start? Y / N

In the worst case scenario, how many valves will be running at the same time either by multiple valves per zone or multiple programs running at the same time? _____

Is there a flow meter? Y / N State size and brand _____

Is there a flow monitor? Y / N State size and brand _____

Is there a radio or cellular phone being used? Y / N
State model and brand _____

Are there any other accessories to be powered up? Y / N Please state make and model _____

Control Tech USA, Inc. recommends for safety and usability the irrigation controls and the solar power supply be housed in a stainless steel or aluminum pedestal or wall mount type enclosure.

Specify type of enclosure? Stainless Steel Pedestal / Stainless Steel Wall Mount

Aluminum Pedestal / Aluminum Wall Mount / None (None can mean the irrigation control system is separated from the solar power supply, or the end user or contractor will supply an enclosure of some type. Please let us know which scenario is correct.)

Lighting

What type of electricity is powering the lights? 120vac / 12vac / 12dc / other _____

What type of lights are being used? _____

What type of lamp is being used? _____

How many lights are being used? _____

What is the total watts used? _____

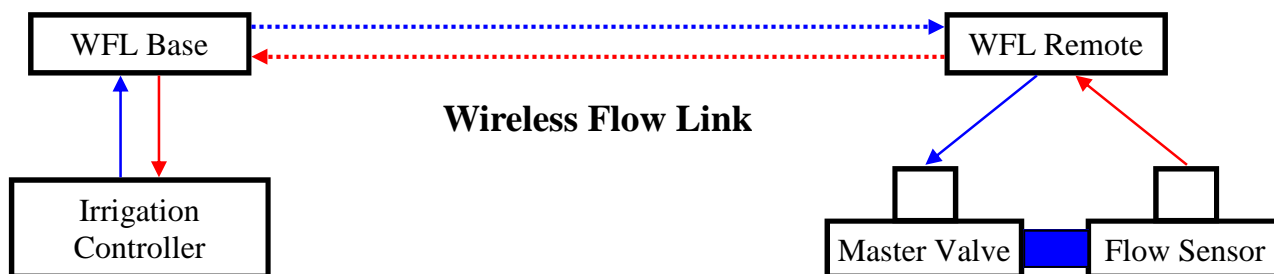
Will the lights run from dusk to dawn? ____ By a timer? ____ By both? ____

Are there any other accessories to be powered up? Y / N Please state make and model _____

Light Industrial

Please call Control Tech and we will help you determine the right solar power supply for you.

Wireless Links



- Applications
- Flow data from sensor to controller, with or without MV
- Pump Start or Master valve control, single controller or multiple
- Tank or pond level monitoring with pump start or MV
- Remote switching
- Standard features include
 - Range 2400 feet line of site, standard antennas
 - Nema 4 Thermoplastic enclosure with lockable latch (6x6x4 Base, 10x8x6 Remote)
 - Pole mount standard for Remote
 - Wall mount standard for Base
 - Self contained 12vdc with solar panel DC model only
 - 2.4ghz spread spectrum radios
 - Master valve closure upon host controller power failure
 - Operates NC or NO master valves
 - Manual over-ride switches on Remote
 - Battery backup on all Base Units
- Options include:
 - Heavy Duty Lightning Protection for Remote Units: **-LP**
 - Pole Mount Kit for Base Unit: **BPMKIT**
 - Specialty antennas for extended ranges
 - Stainless or Cold Rolled Steel enclosures
- Ordering Information:

<ul style="list-style-type: none"> • WFL-MV-DC • WFL-MV-AC • WFL-DC • WFL-AC • WSL-PS-AC • WSL-PS-DC • WSL-PSN-AC • WSL-PSN-DC • WSL-WLC-AC • WSL-WLC-DC • WSL-AC • WSL-AC-IN • WFL-XX-LP 	<ul style="list-style-type: none"> Solar power, DC master valve output, flow sensor input 24vac power, 24vac master valve or pump start output, flow sensor input Solar power, flow sensor input 24vac power, flow sensor input Pump start or MV control (24vac ps/mv) Pump Start or MV control (12vc latching PS relay or MV solenoid) Multiple controllers with one PS or MV, one unit per additional controller (24vac) Multiple controllers with one PS or MV, one unit per additional controller (12vdc) Water level control with pump start (ac) Water level control with pump start (dc) 24vac wireless switch, outdoor 24vac wireless switch, indoor Sample part# for Lightning Protection
--	---
- Water level controls, hard wired without wireless communications.
 - WLC-AC Water level control ac power
 - WLC-DC Water level control dc power



WFL-DC Remote unit with solar power at flow sensor and MV site



WFL-DC Base unit at controller site

Custom designs and modifications available upon request for your particular application

WFL Project Information Sheet

Project Information

Name of Project: _____ Date ____ / ____ / ____

Address: _____ City _____

State _____ Zip _____ Phone (____) _____ Fax (____) _____

Owner of Project: _____

Address: _____ City _____

State _____ Zip _____ Phone (____) _____ Fax (____) _____

General Contractor: _____

Address: _____ City _____

State _____ Zip _____ Phone (____) _____ Fax (____) _____

Installation Contractor: _____

Address: _____ City _____

State _____ Zip _____ Phone (____) _____ Fax (____) _____

Anticipated Date of Installation: ____ / ____ / ____

Remote Unit: the unit connected to the flow sensor and master valve.

Is there 110vac available close by to power the Remote Unit?

____ Yes – order AC system ____ No – order DC system

Is a master valve going to be used? ____ Yes – order MV system ____ No – omit MV

Note: AC systems will use a 24vac solenoid; DC systems will use DC latching solenoid.

What is the distance between the Remote Unit and Base Unit? _____ Feet

Are there any obstructions between the Remote and Base unit? ____ Trees ____ Hill(s)

____ Buildings ____ Signs ____ Small Structures ____ Light Poles ____ Monuments

____ Other explain: _____

Both AC and DC systems come standard with a 2" pole mounting system for the Remote Unit. Optionally you could choose a 2.5" pole or a flat surface mounting system should the Remote Unit need to be located on a stronger pole, wall, or other flat surface. Check option desired ____ 2.5" pole ____ Flat surface

If you need a DC system, will the Remote Unit and solar panel be mounted on something other than a 2" pole?

____ Yes ____ No If yes, please describe the location: _____

For those area that are prone to lightning strikes we strongly recommend the Lightning Protection option.

Lightning Protection: ____ Yes ____ No

Will this unit require a high security steel enclosure? ____ Yes

Base Unit: the unit connected to the irrigation controller.

The Base unit comes standard with two types of flat surface mounting options for mounting it on a wall, fence, pedestal or enclosure surface, etc... Does your location require the optional 2" pole mounting kit? ____ Yes

If the unit will be mounted more that 3 feet away from the irrigation controller, then how far? _____ Feet

Will this unit require a high security steel enclosure? ____ Yes

Take digital pictures of Base location towards Remote location, from Remote location to Base location, and of each Units locations. E-mail all pictures to sales@controltechusa.com referencing the project and customer names.

Lightning and Surge Protection

120vac Surge Arrestor



The PSA130 is a hardwired heavy duty 2 stage 120vac surge arrestor and line conditioner

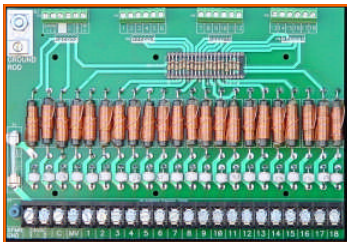
- Steel enclosure designed to fit inside double gang electrical junction box
- Stage 1 clamps at 130 volts in less than 1ns with 9KA of discharge current capacity.
- Stage 2 clamps at 350 volts in less than 1ns with 10KA of discharge current capacity.
- High Frequency noise filtering circuitry.
- Dimensions: 4" x 1.75" x 1.50"
- Ordering Information: **PSA130**

PSA130 Assembly



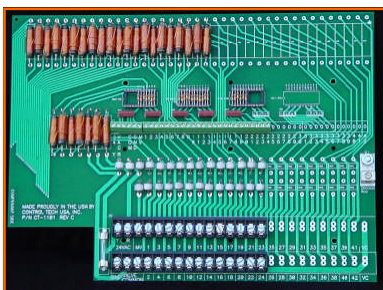
- PSA130 installed with switched GFCI outlet in steel oversize dual junction box
- Wiring pigtails provided for input and output
- Available in weatherproof and non-weatherproof assemblies
- Dimensions: 4.6" x 4.6" x 3"
- Ordering Information: **PSA130ASSY**, **PSA130ASSYWP** weatherproof

Universal Lightning Boards

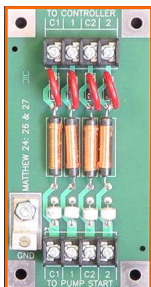


Universal lightning protection for 24vac irrigation controls

- Will work with most 24vac irrigation controllers
- Size ranges from 4 to 42 stations
- 3 levels of lightning protection for:
 - 24vac
 - Common
 - Master Valve or Pump Start
 - Output zones
- Large grounding lug
- Simple to install
- Nema 4 enclosures available as needed with some applications
- Dimensions
 - 4-18 board: 8.75" x 6.00"
 - 24-42 board: 13.5" x 10.00"
- Ordering information: **ULB-XX** (XX = Station count)



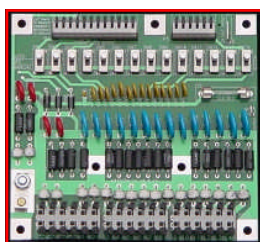
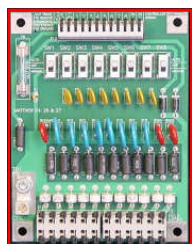
Pump Start Lightning Board



Protect pump start or master valve outputs from lightning strikes

- * Two channels per board
- * Three layers of protection
- * Large grounding lug
- * Dimensions
 - * Ordering Information: **PSLB**

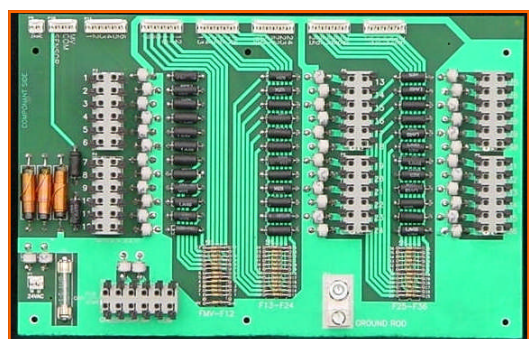
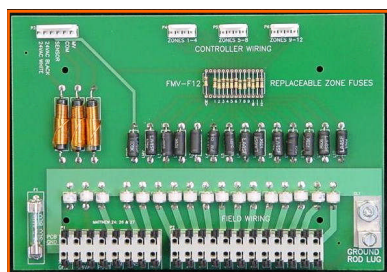
Motorola Lightning Boards



Lightning protection for Motorola Irrigation Controls

- 4 levels of lightning protection for
 - Output zones
 - Input lines
 - 24vac auxiliary power output
- Switches in output zones for Automatic, Off, and Manual modes
- Earth ground referenced common
- Large grounding lug
- Available for AC or DC controllers
- Board sized in 8, 12, or 14 output zones
- Dimensions:
 - 8 zone board: 5.00" x 6.50"
 - 12 & 14 zone board: 7.00" x 6.50"
- Order information: MLB-X-XX (X = 8, 12, or 14; XX = AC or DC)

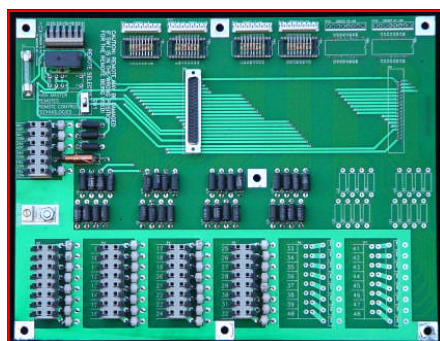
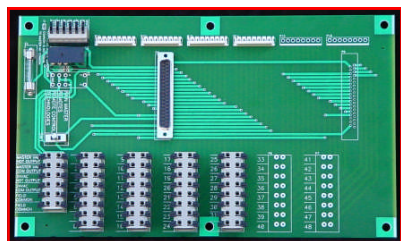
Superior Lightning Boards



Superior Controls Series of lightning protection boards is designed exclusively for Superior Controls, Co Sterling and Mist Master irrigation controllers. These boards can be ordered with new controllers from Superior Controls as an "F" option for their Sterling or Mist Master controllers, or as a retro kit for existing controllers from Control Tech USA, Inc. (Control Tech USA, Inc. is an authorized distributor and service center for all Superior Controls irrigation controllers.)

- Retro Kits available for 4, 8, 12, 18, 24, 30 and 36 station controllers
- 3 levels of lightning protection for:
 - 24vac input power
 - Common output
 - Master valve or Pump start output
 - Sensor input
 - Valve outputs
- Large grounding lug
- Screw driverless field wire terminal blocks
- Retro Kits for existing controllers are simple to install
- Dimensions
 - 4-12 station board: 8.75" x 6.00"
 - 18 - 36 station board
- Retro Kit Ordering information (XX = controller size 04, 08, 12, 18, 24, 30, 36)
- SLB-XX Retro Kit

Universal Interconnect Boards

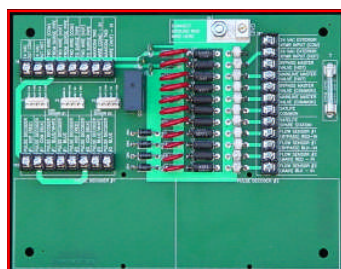


Simplify wiring and add versatility to any irrigation control system

- Will work with most 24vac irrigation controllers
- Size ranges from 12 to 48 stations in increments of 4 stations
- Remote port for Rain Master and Remote Technologies
- Master valve or pump start isolation relay
- Master and Slave controller connections for multiple controllers
- Optional 3 levels of lightning protection for:
 - 24vac input or output
 - Common
 - Master Valve or Pump Start
 - Output zones
- Dimensions
 - UIC board 11.75" x 7.00"
 - UICL board 13.50" x 10.50"
- Ordering information:
 - Without lightning protection: UIC-XX (XX = station count)
 - With lightning protection: UICL-XX (XX = station count)

2100 Series Interconnect Board

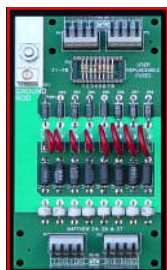
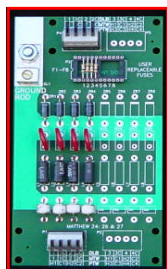
For use with Data Industrial 2100 dual flow monitor and Rain Bird Maxicom



- Simplify and organize all necessary connections
- Connects dual flow meter, dual master valves and additional controls
- Use with Link or Two Wire communications
- Fits inside Data Industrial 2100 enclosure
- Available with or without lightning protection
- Dimensions: 9.25" x 7.25"
- Ordering Information:
 - Without lightning protection: IC-2100
 - With lightning protection: ICL-2100

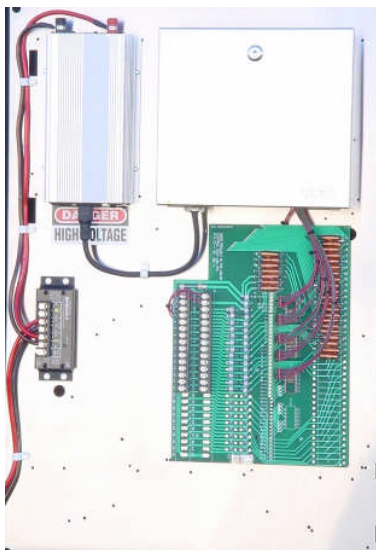
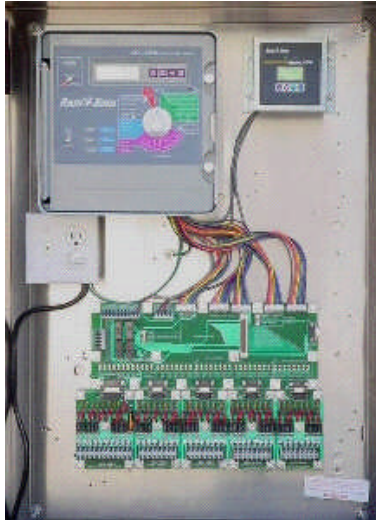
Data and Communication Boards

Protect data and communications lines from lightning strikes and power surges



- 2 or 4 channels configured as:
 - Data
 - Communication
 - Data and Communication
- Data line voltages from 5 to 35 volts DC
- Communication line voltage set at 24 volts AC
- Five layers of lightning and power surge protection
- Dimensions 3.50" x 6.50"
- Ordering information: (X = 2 or 4 Channels) (XX = 5, 12, 30, 35 volts DC)
 - Data only: DLB-X-XX
 - Communication only: CLB-X
 - Data and Communication: DCLB-XX
 - Data and Communication, one channel each: DCLB-01-XX

Engineered Irrigation Control Assemblies



Description of above control assemblies
On the next page

Our Irrigation Control Assemblies are built with the following features:

- Weather and Vandal resistant enclosures available in Stainless Steel, Cold Rolled Steel, or Aluminum in Wall Mount or Pedestal configurations.
- Your choice of irrigation controller both make and model.
- Interconnect wiring system.
- Primary power or 120vac surge protection with GFCI switched outlet.
- Large lug for grounding the control system.

Upgrade the assembly with the following items:

- Control Assembly configured as a stand alone or as part of a central control system.
- Solar Power Supply customized per control unit
- Output lightning protection.
- Data and Communication line lightning protection.
- Flow sensor
- Flow monitor
- E.T. sensor with or without rain measuring sensor
- Rain Sensor
- Vandal resistant rain sensor enclosure
- Remote control
- Isolation relay
- Antenna options
- Quick Pad for Strong Box pedestal assemblies
- UPS for 24 hour uninterruptible power source
- Grounding kit

Specification sheet follows on the next page



Engineered Irrigation Control Assembly Specification Guide

System Type - Controller - Controller Size - Enclosure Type - Available Options*

The sample specifications below refer to the pictures on the previous page

Top Picture: **CTCICA - RBSAT - 32 - SS/12/QP - MXICL - 1502**

Middle Picture: **CTSICA - RBMC - 32 - ULB**

Bottom Picture: **CTSICA - AC - 24 - SS/12/QP - SPS - ULB**

System Type

<u>CTCICA</u>	Central Control Satellite
<u>CTSICA</u>	Stand Alone

Controller

<u>RBMC</u>	RAINBIRD ESP-MC
<u>RBSAT</u>	RAINBIRD ESP-MC SATALITE
<u>RBSITE</u>	RAINBIRD ESP-MC SITESAT
<u>RBLXSITE</u>	RAINBIRD ESP-LX-SITESAT
<u>RBIM</u>	RAINBIRD IM
<u>ITMC</u>	IRRITROL MC+B
<u>ITD</u>	IRRITROL DIAL
<u>RMSE</u>	RAINMASTER SENTAR
<u>RMEG</u>	RAINMASTER EAGLE
<u>RMEGIC</u>	RAINMASTER EAGLE I CENTRAL
<u>SCST</u>	SUPERIOR STERLING
<u>SCSTID</u>	SUPERIOR STERLING IRRIDIGITAL
<u>HIIC</u>	HUNTER ICC
<u>HIICCSAT</u>	HUNTER ICC SATELITE
<u>HIACC</u>	HUNTER ACC
<u>WM</u>	WEATHERMATIC LM
<u>WMSL</u>	WEATHERMATIC SL
<u>WMSLW</u>	WEATHERMATIC SLW
<u>AC</u>	AQUA CONSERVE
<u>CS</u>	CALSENSE

()any number following Controller Manufacturer indicates quantity of controllers in assembly

Enclosure Type

<u>SS*</u>	Strong Box® Stainless Steel
<u>CR*</u>	Strong Box® Cold Rolled Steel
<u>RBSS</u>	Rain Bird Stainless Steel Pedestal
<u>/12</u>	With 12" Pedestal Extension
<u>/QP</u>	With Strong Box® Quick Pad
<u>AL**</u>	Aluminum Pedestal or Wall Mount

*Denotes Strong Box part number

** Denotes Control Tech part number

Available Options

***Separate multiple options with -**

<u>SPS</u>	Solar Power Supply (fill out Solar Project Info Sheet)
<u>RCC</u>	Remote Control Technologies Remote Card
<u>PMUA</u>	Rain Master Promax Universal Remote
<u>PSAA</u>	120vac surge arrestor with switched GFCI
<u>UIC</u>	Universal Wiring Interconnect Board
<u>UICL</u>	Universal Lightning Protected Interconnect Board
<u>ULB</u>	Universal Lightning Protection Board
<u>DLB</u>	Data Line Lightning Protection Board-Flow Sensing
<u>CLB</u>	Two-wire Path Lightning Protection Board
<u>DCLB</u>	Data & Two-Wire Path Lightning Protection Board
<u>IC2100</u>	Data Industrial 2100 Interconnect Board
<u>ICL2100</u>	Lightning Protected 2100 Interconnect Board
<u>GRKT</u>	Equipment Grounding Kit
<u>WR-7</u>	Irrisoft Weather Reach E.T. Controller
<u>WFC</u>	Wireless Flow Control and Sensing
<u>1500</u>	Data Industrial 1500 flow monitor
<u>1502</u>	Rain Bird 1502 flow monitor
<u>2100</u>	Data Industrial 2100 dual flow monitor
<u>RS</u>	Rain Sensor
<u>WRS</u>	Wireless Rain Sensor
<u>RSVR</u>	Vandal Resistant Rain Sensor Housing
<u>ANT1</u>	Flat Mount Antenna
<u>ANT2</u>	Pole-Mount Whip Antenna
<u>ANT3</u>	Pole-Mount Yagi Antenna
<u>ANTLP</u>	Pole-Mount Antenna Lightning Protection
<u>CTU-IR</u>	Pump Start/Master Valve Isolation Relay

()any number following option indicates quantity of specific options
(for descriptions of options, see Appendix A)

Note: If the controller or option you wish to specify isn't listed above, please contact our office for specification reference.

APPENDIX A

Description of Available Options

/12-With 12" Pedestal Extension: The pedestal-type enclosure shall come with the 12" pedestal extension.

/QP-With Strong Box Quick Pad: The assembly shall come with a Strong Box® Quick Pad to mount the enclosure on.

AL(PED)- Aluminum Pedestal Enclosure: The enclosure shall be an Aluminum pedestal-type enclosure manufactured by Bruner Company for Control Tech USA, Inc. The size shall be determined by the amount of instrumentation in the assembly.

AL(W/P)- Aluminum Wall/Pole Mount Enclosure: The enclosure shall be an Aluminum wall mount/or pole mountable enclosure manufactured by Bruner Company for Control Tech USA, Inc. The size shall be determined by the amount of instrumentation in the assembly.

ANT1-Flat Mount Antenna: A flat-mounted antenna of specified frequency range shall be installed on the top of the enclosure. It shall be installed as to insure waterproof specifications of enclosure.

ANT2-Pole Mount Antenna: A pole-mounted whip antenna of specified frequency range shall be installed on the top of the solar equipment pole. The wire shall be run in flex-conduit down to the pole mounted controller.

ANT3-Pole Mount Yagi Antenna: A pole-mounted Yagi antenna of specified frequency range shall be installed on the top of the solar equipment pole. The wire shall be run in flex-conduit down to the pole-mounted controller, or to a transition box at the bottom of the pole for underground feed to pedestal mounted controller.

ANTLP-Pole Mount Antenna Lightning Protection: A lightning protection device shall be added into enclosure that shall protect the central control radio from lightning.

CLB-Communication Lightning Protection Board--flow sensing: This board shall have 5 levels of lightning protection for a 24vac two wire path communication line.

CR-Strong Box® Cold Rolled Pedestal Enclosure: The enclosure shall be a Strong Box® power-coated cold rolled steel pedestal-type enclosure manufactured by V.I.T. Products for Control Tech USA, Inc. The size shall be determined by the amount of instrumentation in the assembly.

CR(W/P)-Strong Box® Cold Rolled Wall/Pole Mount Enclosure: The enclosure shall be a Strong Box® power-coated cold rolled steel wall mount/or pole mountable enclosure manufactured by V.I.T. Products for Control Tech USA, Inc. The size shall be determined by the amount of instrumentation in the assembly.

CTU-IR-Pump start or master valve isolation relay: This relay physically isolates multiple controllers that commonly activate one pump start relay or one master valve.

DCLB-Data Line and Communication Lightning Protection Board--flow sensing: This board is a combination Data Line and Communication Lightning Protection Board performing both DLB and CLB functions.

DLB-Data Line Lightning Protection Board--flow sensing: This board shall have 5 levels of lightning protection for the incoming flow sensing data line(s). It shall be capable of protecting 2 or 4 data lines, and provide protection for 5VDC, 12VDC, 30VDC, or 35VDC data lines, depending on specified flow sensor/monitor.

DS-Driveway Sensor Assembly: See MAC description on page 7.

FLS1-One Flow Sensor of Choice: A flow sensor of specifier's/end-user's choice shall be included with the enclosure. It shall be tested for operation with the controller and/or monitor. Control Tech USA, Inc. is a distributor for Data Industrial and EMCO flow products.

FLS2-Two Flow Sensors of Choice: Two flow sensors of specifier's/end-user's choice shall be included with the enclosure. They shall be tested for operation with the controller and/or monitor. Control Tech USA, Inc. is a distributor for Data Industrial and EMCO flow products.

Continued on next page

Description of Available Options

(continued)

FLM1-One Flow Monitor of Choice: A flow monitor of specifier's/end-user's choice shall be installed in the enclosure. It shall be wired and tested for operation with controller. Control Tech USA, Inc. is a distributor for Data Industrial and EMCO flow products.

FLM2-Two Flow Monitors of Choice: Two flow monitors of specifier's/end-user's choice shall be installed in the enclosure. They shall be wired and tested for operation with controller. Control Tech USA, Inc. is a distributor for Data Industrial and EMCO flow products.

GRKT-Equipment Grounding Kit: The assembly shall come with an assembly grounding kit that has the appropriate wire, ground rods, and/or plate, and earth ground enhancing backfill for current central control manufacturer grounding specifications.

IC2100-Data Industrial 2100 Interconnect Board: The assembly shall include a Control Tech IC2100 wiring interconnect board. The board shall be installed in the cabinet of the 2100 unit.

ICL2100-Lightning Protected 2100 Interconnect Board: The assembly shall include a Control Tech ICL2100 lightning protected interconnect board. The board shall be installed in the cabinet of the 2100 flow monitor unit, and shall protect the 2100 unit from surge and lightning damage coming in on the power, data, and communications lines.

RMPMUA-Rain Master Promax Remote Control: Rain Master's Promax UA remote control with the appropriate antenna shall be installed on the outside of the enclosure.

RCCRC-Remote Control Technologies Remote Card: The appropriate Remote Control Technologies remote card shall be installed in the enclosure. The appropriate antenna shall be installed on the outside of the enclosure.

RS-Rain Sensor: Hunter Mini-Click rain sensor, pole or enclosure mounted as requested. The Hunter Wireless Remote Rain Sensor is also an option.

RSVR-Vandal Resistant Rain Sensor: Strong Box Vandal Resistant Rain Sensor mounted on enclosure

SPS-Solar Power Supply: Self contained solar power supply designed specifically for the controller assembly specified and the operation of the irrigation system as a whole. When choosing this item for your irrigation or lighting control assembly, you'll need to fill out and return as part of the specification sheet a [Solar Project Information Sheet](#).

SS-Strong Box® Stainless Steel Pedestal Enclosure: The enclosure shall be a Strong Box® stainless steel enclosure manufactured by V.I.T. Products for Control Tech USA, Inc. The size shall be determined by the amount of instrumentation in the assembly.

SS(W/P)-Strong Box® Stainless Steel Wall/Pole Mount Enclosure: The enclosure shall be a Strong Box® stainless steel wall mount/or pole mountable enclosure manufactured by V.I.T. Products for Control Tech USA, Inc. The size shall be determined by the amount of instrumentation in the assembly.

UIC-Station Wiring Interconnect Board: This board simplifies interconnect wiring from the controller with wiring from the field. The board shall have push-in (no screwdriver needed) wire socket terminals capable of handling 12 ga. wire--no screw terminals. The board shall have a DB35 universal remote connector with a switch for Rainmaster or Remote Control Technologies operation. The board shall also have a master valve isolation relay. There shall also be a 2 Amp fuse-protected 24VAC terminal for station testing and auxiliary equipment usage. This board is available in available with 12 to 48 outputs.

UICL-Lightning Protected Interconnect Board: This board simplifies interconnect wiring from the controller with wiring from the field and protects the controller from lightning strikes coming in from the field through the field wires. Each station shall have 3 levels of protection. The board shall have push-in (no screwdriver needed) wire socket terminals capable of handling 12 ga. wire. The board shall have a DB35 universal remote connector with a switch for Rainmaster or Remote Control Technologies operation. The board shall also have a master valve isolation relay. There shall also be a 2 Amp fuse-protected 24VAC terminal for station testing and auxiliary equipment usage. This board is available in available with 12 to 48 outputs

ULB-Universal Lightning Protection Board: The protects the controller from the harmful affects of a lightning strike or power surge. Each output plus the common, master output, and 24vac input are protected by 3 levels of protective elec-

Commercial Irrigation Controller Repair Services



Factory Authorized Controller Service Center For:
Rain Bird, Irritrol Systems, Rain Master, Weathermatic

Timely repairs
Optional 24hr priority service
Optional exchange of controller panel (Irritrol "B" series only)
Six month limited warranty on workmanship and material
Shipping available to any location in the U.S.A.

Contractor Service Rates

Labor Code	Labor Rate	Controller Model						
		Irritrol Systems		Rain Bird		Rain Master	Superior	Weathermatic
		MC+ MC+ B	Dial AB Dial B	*ESP-MC ESP-SAT	ESPLX+	RME, Sentar Hawk	Sterling	LMC
CR-ALABOR*	\$198.00	24 - 42	24 - 36	All		24 - 36	24 - 36	24 - 36
CR-BLABOR*	\$180.00	12 & 18	14, 16, 18		20 & 24	12 & 18	12 & 18	14 & 19
CR-CLABOR*	\$162.00	4, 6, 8	5, 7, 11		12 & 16	6 & 8	6 & 8	11
CR-DLABOR*	\$144.00	All Residential Style Controllers, 12 zones or less						
CR-LABOR* Labor Rate plus Materials. Charged in 15 minute incre- ments, 30 min- utes minimum.	\$34.00 Per 1/4 hr			*CCU MIB & LINK BOARDS, OUTPUT BOARDS				
		Hunter Golf and Buckner Modular controllers, one hour minimum plus materials						
		All Electro-mechanical Controllers						
CR-KLABOR	\$68.00	Keypad replacement; Labor Rate plus Materials						
EXCHANGE	\$68.00	Over the counter exchange fee for all Irritrol "B" series controllers						
PRIORITY	\$68.00	24 hour turn around service fee per controller						

*Notes:

- Repairs that require more than one hour of time to repair may be subject to additional labor charged in 15 minute increments at CR-LABOR rates.
- Repairs that require a keypad in addition to other repairs will have the keypad billed as an additional part. Ie CR-BLABOR plus Keypad. The entire repair may be billed on a time and materials basis depending on the cost.
- Rain Bird Controllers or Communication devices that are part of an active Maxi system will be subject to a 15 minute minimum communications test charged at CR-LABOR Labor Rates.
- Minimum diagnostic charge is 30 minutes of CR-LABOR (\$68.00)
- Shipping and handling: Minimum \$10 per individual controller. Multiple controllers are pro-rated per controller.



List Price Sheet

Price list effective 08/08/09 Ph (303)-814-0307 fax (303)-814-3719

<u>Part Number</u>	<u>Price</u>
<u>Solar Power*</u>	
Solar Power Supplies custom built to specified equipment to be powered.	
<u>Call for options and quote</u>	
Solar Power Supplies Packaged specifically for Irrigation systems	
Solar Power Supplies custom engineered for Landscape, Monument, or Structure Lighting using low power florescent or LED lighting technology	

<u>Wireless Links</u>	
WFL-MV-DC	\$4350.00
WFL-MV-AC	\$2866.00
WFL-DC	\$4216.00
WFL-AC	\$2720.00
WSL-PS-AC	\$2705.00
WSL-PSN-AC	\$1423.00
WSL-PS-DC	\$4333.00
WSL-PSN-DC	\$1431.00
WSL-WCL-AC	\$4287.00
WSL-WCL-DC	\$6542.00
WSL-AC	\$2762.00
WSL-AC-IN	\$1908.00

<u>Additional Options</u>	
DC Lightning Protection	+\$225.00
AC Lightning Protection	+\$465.00
BPMKIT	\$146.00

Stainless Steel Enclosures

Call for Quote

Data Industrial flow sensors,
Netafim USA Hydrometers
valves are available upon request.

Water Level Controls

WLC-AC	\$1572.00
WLC-DC	\$2684.00

<u>Part Number</u>	<u>Price</u>
<u>MV or PS Isolation Relay</u>	
CTU-IR-HW	\$75.00
CTU-IR-DR	\$75.00
(Not Shown in Catalog)	

<u>120vac surge protectors and line conditioners</u>	
PSA130	\$190.00
PSA130ASSY	\$428.50
PSA130ASSYWP	\$555.00

<u>Universal Lightning Boards</u>	
<u>4-42 Stations</u>	
ULB-4	\$195.50
ULB-8	\$296.50
ULB-12	\$325.50
ULB-16	\$376.00
ULB-18	\$392.00
ULB-24	\$631.00
ULB-30	\$707.00
ULB-36	\$785.00
ULB-42	\$888.00

<u>24vac pump start</u>	
PSLB	\$147.00

<u>Accessories</u>	
<u>4-18 Enclosure</u>	

ENC-10X8X4	\$261.5
------------	---------

<u>24-42 Enclosure</u>	
ENC-16X4X7	\$511.50

Prices are subject to change
without notice.

* Special Order Item designed
to custom specifications, may
require up to 50% deposit and
customer pays all freight
charges.

Part Number **Price**

<u>Motorola</u>	
<u>Lightning Boards</u>	
MLB-8-ACV3	\$275.00
MLB-12-AC	\$378.00
MLB-14-AC	\$406.00
MLB-8-DC	\$278.50
MLB-12-DC	\$340.00
MLB-14-DC	\$364.50

<u>Superior Controls</u>	
<u>Lightning Board</u>	
<u>Retro Kits</u>	
SLB-4-RK	\$265.50
SLB-8-RK	\$326.00
SLB-12-RK	\$384.00
SLB-18-RK	\$533.50
SLB-24-RK	\$602.50
SLB-30-RK	\$670.50
SLB-36-RK	\$761.00

<u>Universal</u>	
<u>Interconnect Boards</u>	
UIC-8	\$330.50
UIC-12	\$354.00
UIC-16	\$371.50
UIC-24	\$412.50
UIC-28	\$436.50
UIC-32	\$454.00
UIC-36	\$518.50
UIC-40	\$535.50
UIC-48	\$576.50
UICL-12	\$654.00
UICL-16	\$700.00
UICL-24	\$805.50
UICL-28	\$864.50
UICL-32	\$910.50
UICL-36	\$1016.00
UICL-40	\$1068.50
UICL-48	\$1173.50
36" wire harness use -WHL.	
No additional charge	
I.e. UICL-48-WHL	

Part Number **Price**

<u>Data and Communication</u>	
<u>Lightning Boards</u>	
<u>Data Only</u>	
DLB-2-05	\$215.50
DLB-2-12	\$215.50
DLB-2-30	\$220.00
DLB-2-35	\$220.00
DLB-4-05	\$280.00
DLB-4-12	\$280.00
DLB-4-30	\$289.50
DLB-4-35	\$289.50
<u>Communication Only</u>	
CLB-2	\$220.00
CLB-4	\$289.50
<u>Data and Communication</u>	
DCLB-05	\$285.00
DCLB-01-05	\$218.00
DCLB-12	\$285.00
DCLB-01-12	\$218.00
DCLB-30	\$289.50
DCLB-35	\$289.50

<u>Rain Bird Maxicom</u>	
<u>Data Industrial 2100</u>	
<u>Interconnect</u>	
IC-2100	\$513.50
ICL-2100	\$600.00

<u>Back Plates & Brackets</u>	
Data Industrial 1500 or Rain bird 1502 Mounting Bracket	
CT-716	\$38.35

<u>Custom Irrigation or Landscape Lighting Control Assemblies*</u>	
<u>Call for options and quote</u>	

Custom Applications

If you do not see an item that completely meets your particular need or function, call us.
If we can, we'll custom engineer a system or product just for you.



CONTROL TECH USA, INC. TERMS OF SALE POLICIES AND PROCEDURES

MINIMUM ORDER: 1 ITEM

LATE CHARGE: ALL INVOICES NOT PAID BY THE NET DUE DATE WILL BE SUBJECT TO A 1.75% PER MONTH (21% ANNUAL PERCENTAGE RATE).

CREDIT TERMS: CREDIT WILL BE EXTENDED TO THOSE CUSTOMERS WHICH THE COMPANIES CREDIT DEPARTMENT DETERMINES CREDIT WORTHY. CUSTOMERS MAY CONTINUE TO USE CREDIT PROVIDED THEIR CREDIT WORTHINESS IS MAINTAINED. IF CREDIT WORTHINESS IS NOT MAINTAINED, ALL OUTSTANDING OBLIGATIONS UNDER THE ACCOUNT, WITH THE OPTION TO THE COMPANY TO GIVE OR NOT TO GIVE WRITTEN NOTICE, WILL BE IMMEDIATELY DUE, AND FUTURE ORDERS WILL BE ALLOWED ONLY BY C.O.D.

ORDER PLACEMENT: ORDERS MAY BE PLACED BY TELEPHONE, FAX, OR E-MAIL AT THE NUMBERS STATED BELOW IN CUSTOMER INFORMATION AND ORDERING INFORMATION.

ORDER SHIPMENT: CONTROL TECH USA, INC WILL DO EVERYTHING TO MEET REQUESTED SHIP DATE. HOWEVER, CONTROL TECH USA, INC. ASSUMES NO LIABILITY FOR FAILURE TO DELIVER AN ORDER BY THE REQUESTED DATE.

FREIGHT TERMS: UPS GROUND FREIGHT WILL BE PAID BY CONTROL TECH USA, INC. ON ANY ORDER OF \$1200.00 OR MORE ON ANY LIGHTNING PROTECTION BOARD, INTERCONNECT BOARD, OR LABOR SAVING DEVICE. FREIGHT WILL BE CHARGED ON ALL POWER SOLUTION PRODUCTS INCLUDING SOLAR POWER SUPPLIES, AND WIRELESS LINK SYSTEMS. ANY FREIGHT UPGRADES WILL BE AN ADDITIONAL CHARGE.

SPECIAL ORDER ITEMS: SPECIAL ORDER ITEMS MAY NOT BE RETURNED FOR CREDIT UNLESS APPROVED BY CONTROL TECH USA, INC MANAGEMENT.

CLAIMS FOR SHORTAGES: ALL CLAIMS FOR SHORTAGE SHOULD BE MADE IN WRITING TO THE COMPANY WITHIN 15 DAYS OF RECEIPT OF GOODS.

DEFECTIVE GOODS RETURN POLICY: REQUESTS TO RETURN DEFECTIVE GOODS MUST BE SUBMITTED IN WRITING TO BE APPROVED BY THE COMPANY.

PRODUCT RETURN POLICY: RETURNED PRODUCTS WHICH ARE NON-DEFECTIVE MUST BE PRE-APPROVED BY THE COMPANY. A 20% RESTOCKING CHARGE WILL BE APPLIED

CUSTOMER INFORMATION: (303) 814-0307 BETWEEN 9:00 AM AND 4:00 PM MST.

E-MAIL: INFO@CONTROLTECHUSA.COM

CUSTOMER SERVICE: (303) 814-0307 BETWEEN 9:00 AM AND 4:00 PM MST

E-MAIL: SERVICE@CONTROLTECHUSA.COM

ORDERING INFORMATION: VOICE 303-814-0307 9-4 M-F MST; FAX (303) 814-3719 24HRS A DAY.

E-MAIL SALES@CONTROLTECHUSA.COM