

1.0 BASIC WeatherTRAK ET Pro² X Central INFORMATION

1.1 General Controller Information

WeatherTRAK ET Pro² X Central is designed for commercial and municipal applications where water conservation and optimum plant health is paramount. This product features Central Internet Management (CIM) providing the ability to manage your irrigation system wherever Internet access can be obtained. The WeatherTRAK ET Pro² X Central offers the same features and benefits as the ET Pro² Central Series and is available in 12-30 station count models in 6-station increments. The controller is available in a wall mount, powder-coated cold-rolled key-locking enclosure or an optional pedestal. The controller is suitable for both indoor and outdoor use.

WeatherTRAK ET Pro² X Central is compatible with *WeatherTRAK ET Everywhere™* Service, as provided by HydroPoint Data Systems, Inc., Petaluma, CA.

1.2 WeatherTRAK ET Everywhere Service Features

WeatherTRAK ET Pro² Central and services will be provided by HydroPoint Data Systems, Inc., Petaluma, CA.

WeatherTRAK ET Pro² X Central will include a built-in, two-way GPRS wireless radio that receives local ET updates sent via *WeatherTRAK ET Everywhere Service™*. The same wireless radio will communicate in real-time controller status or alerts to a web application. Each controller will have an assigned ET Microzone that will allow it to receive local ET for the controller's exact longitude and latitude coordinates. ET Everywhere can be provided upon service activation and additional renewable service subscriptions are available in single year increments.

WeatherTRAK ET Pro² X Central will have:

- Daily, local ET transmitted wirelessly to controller
- ET On or Off by station
- Daily and average weekly ET display
- Full remote programming, monitoring, alert and reporting capability
- CIM (Central Internet Management) to manage irrigation schedules for single or multiple sites.

1.3 Controller Communication One-way and Two-Way Central™ Internet Management Options

The WeatherTRAK ET Pro² X Series will have the ability to be specified as either one- or two-way communication. One-way communication systems can be upgradeable to two-way Central Internet Management via a hardware accessory kit and increase in monthly subscription service. Two-way communication will provide Central Internet-based Management via Internet access to WeatherTRAK Central™ via a secure web application.

1.4 Controller Configurations

The ET Pro² X Series controller is available in one of two communication modes: 1) ET Pro² X controllers with one-way communication and 2) ET Pro² X Central controllers with two-way Central Internet Management (CIM) capabilities.

For specific model numbers refer to the WeatherTRAK price list. Both products are available in the following configurations and station counts:

ET Pro² X Standard One-Way Models

| Configuration | Cabinet Style | Station Count | Communication Model No. |
|--------------------|--|----------------|-------------------------|
| Wall Mount Chassis | 18 gauge Powder-coated cold-rolled steel w/ key-lock entry | 12, 18, 24, 30 | One-way – WTPRO2X -RI |

ET Pro² X Central Two-Way Model

| Configuration | Cabinet Style | Station Count | Communication Model No. |
|--------------------|---|----------------|-------------------------|
| Wall Mount Chassis | 18-gauge, Powder-coated cold-rolled steel w/ key-lock entry | 12, 18, 24, 30 | Two-way – WTPRO2XC-RI |

1.6 Controller Warranty

WeatherTRAK ET Pro² X Central has a five (5) -year limited warranty for parts and labor. The optional pedestal has a five (5) -year limited warranty for parts and labor.

2.0 BASIC WeatherTRAK ET Pro² X FEATURES

2.1 Standard Controller Features

WeatherTRAK ET Pro²X Central features:

- 12-30 station models.
- Indoor/outdoor wall mount or optional pedestal style with key-locking enclosure.
- 18 gauge, powder-coated, cold-rolled steel w/ key-lock entry
- Four programs with seven independent water day patterns and schedules. Each program will have two start times with up to 20 cycles, with one water window per program. A second start time is available for High ET requirements only.
- WeatherTRAK Scheduling Engine™ software, proven by more than 23 independent, multi-year studies to apply the right amount of water for optimum plant growth. This programming capability incorporates the Irrigation Association's Best Management Watering Practices as well as CIT (Center for Irrigation Testing).
- User-defined modes that support High ET syringe cycles within a single day's water window for use where required by conditions.
- Independent station watering and watering day adjustment from -50% to +25% in 5% increments.
- Compatibility with normally-closed rain, freeze switches
- Compatibility with Data Industrial IR-220 Series and Creative Sensor Technology series flow sensors.

- Compatibility with normally open or normally closed master valves, (maximum allowable in-rush current shall not exceed 800 mA).
- Non-volatile memory that maintains programs and internal clock in case of power outage.
- Flow monitoring capability for high-flow, leak detection and no-flow conditions. WeatherTRAK also provides the option to specifically exclude station(s) from flow monitoring as needed.
- Preview mode that displays flow data and irrigation schedules by program for each station.
- Reports menu provides accumulated totals of flow usage and time on a daily, weekly and monthly basis.
- Built-in sprinkler, soil, slope and plant databases.
- Ten different types of alert functions act as true water management tools.
- Cycle and soak programming that supports up to 20 cycles per start time.
- 365-day calendar scheduling.
- User-defined start times and water window from 1-24 hours by program.
- Valve wire diagnostic circuit that identifies shorts, no-connects, and field wiring issues.
- Selectable Stack or Overlap scheduling modes. In Overlap mode, there are up to four independent programs, manual stations, and a pump start can also be operated.
- Dedicated master valve terminal output for either normally open or closed models.
- Pump start can be assigned to any single station output.
- Heavy duty transformer for simultaneous operation of multiple programs inclusive of a master valve, pump start and manual operation.
- Seven independent water day modes:
 - Optimized by WeatherTRAK (ET)
 - Odd*
 - Even*
 - Interval, 1-30 Days
 - Days of Week, 1-7 days
 - Days of Week By Month, 1-7 days per each month of the year
 - Off
- * Automated skip days within selected water days based on actual water requirements. When two consecutive odd days occur, the ET Pro²X Central will irrigate on the second odd day.
- User-friendly, display with easy-to-follow programming.
- Selectable Rain Pause from 1-200 days.
- Two-way Central Internet Management (CIM) communication can be field upgraded as an option and provides wireless communication to the WeatherTRAK Central web link at www.weathertrak.net.
- Automatic synchronization with the web application when controller field changes are made.
- Faster and easier web-based applications truly provide increased water management capabilities wherever Internet access is available.
- Exportable field reports for daily run time and accumulated flow usage for managing monthly water allocations.
- Water budgeting functionality provides management of allocation against actual usage on a daily or date range basis.
- Fourteen sprinkler types including MP Rotators (High Efficiency Sprinklers) and drip emitters as common industry sprinkler types with corresponding precipitation rates and sprinkler efficiencies.
- Seventeen plant types including 3 with user-defined crop coefficients (Kc's) and root depths. All plant types have default root depths that can be changed in 1" increments from 2-36".

2.2 Water Conservation Features

The WeatherTRAK ET Pro²X Central will have:

- The proven WeatherTRAK Scheduling Engine for optimal plant health, water savings and urban runoff reduction.
- Daily ET updated irrigation schedules with an 8-week go-forward schedule for observe schedule for low-water use or other deep rooted plant material.
- Usable rainfall on a station-by-station basis in 2 selectable values to accommodate planters, hanging pots or other specialty watering requirements under eaves or roof overhangs.
- Adjustments in 5% increments on a station-by-station basis to increase or decrease runtimes or cycle and soak times. A second WeatherTRAK adjustment feature allows day frequency changes on the same station-by-station basis (Target MAD).
- Flow sensing and monitoring capabilities including the ability to manage three flow conditions independently (High-flow, No-flow and Leak Detection) individually (by turning other flow modes off) or simultaneously.
- Manual Rain Pause from 1-200 days.
- Compatibility with any normally-closed wired or wireless rain switch or rain/freeze switch to automatically override irrigation schedules during a rain storm or heavily moisture-laden fog.
- Seven independent water day modes providing the industry's most comprehensive day patterns including "Optimized by WeatherTRAK"—an exclusive WeatherTRAK feature that automatically adjusts irrigation days, runtimes, cycle and soak times based on daily ET values. This feature is recognized by the IA's recommended Best Management Water Practices.
- Four selectable program modes, providing user-defined start times and water windows for maximum flexibility for either new or established landscapes.
- Exclusive WeatherTRAK High ET, user-defined second start-time when soil moisture depletion in one day is greater than irrigation system can apply in one schedule—all done automatically.
- Apply the right amount of water to each valve zone based on site attributes inclusive of:
 - 14 different sprinkler types including drip systems
 - Default or user-defined precipitation rate based on each sprinkler type
 - Default or user-defined sprinkler efficiencies based on each sprinkler type
 - 17 different plant types
 - Default or user-defined root depths
 - Default or user-defined crop coefficients (Kc) for custom plants and native grasses on a monthly basis
 - 5 soil types based on USDA soil texture classifications
 - 4 micro-climates (sun exposure levels)
 - 5 slope gradients
 - 4 locations of sprinklers based on slope gradient
 - 2 Usable Rainfall settings (None or 100%)
 - Choice of whether or not to irrigate each specific station within a specified water window
- Cycle count of 1-20 and 0-480 minute Soak periods for User with ET and User w/o ET program modes.
- Skip Days – Automatically skips irrigation days and carries over required irrigation to the following water day when water windows are exceeded.
- Proven water savings and runoff reduction in more than 20 independent, multi-year studies including a 100% pass rate of the Irrigation Association's (IA) Smart Water Application Technology™ performance test (SWAT™ Test) conducted by the Center for Irrigation Technology.

- Daily, weekly, and monthly report generation including from a specific date to provide increased water management and conservation capabilities. These reports can be exported from the web application into MS Office Excel for graphing or other user-defined requirements.
- Continuous web application/controller synchronization so that field changes can be integrated into daily watering schedules. This includes web application lockout when controller is in use as well as automatic uploading to the web application when controller changes are made.

2.3 Convenience Features

WeatherTRAK ET Pro²X Central will have:

- Two-way Central Internet Management (CIM) communication with continuous automatic synchronization for any field changes or web application changes.
- Two-way Central Internet Management communication provides on- and off-site management by use of a laptop or workstation via the Internet.
- Made for contractor ease of use:
 - Large power supply for multiple program operation for grow-in periods.
 - LEDs on each station output for faster field troubleshooting.
 - Large screw-less terminal blocks that can accommodate wire up to 10 Ga.
 - Terminal blocks on one horizontal plane make field changes a snap.
 - Accessible interior space for field wires, particularly for higher station count installations.
 - 6-station output boards for rapid field upgrades.
 - Flow monitoring capability as a standard feature
 - Surge protection standard feature for all station outputs.
 - Optional surge protection for AC input power as needed.
 - Four independent program modes provide maximum flexibility for a wide variety of commercial applications for new and established landscapes.
 - Three-line display with automatic notification of alerts when conflict arises.
- Toll-free customer support, including bilingual assistance (English and Spanish), Monday through Saturday.
- Logical programming sequence incorporating industry-recognized terminology.
- Selectable program modes offers various levels of programming choices from conventional-style programming to optimized water schedules without constant adjustments for changing weather conditions.
- Dual-voltage transformer for usage in either 120V or 220V, single phase AC applications.
- Chassis mounted ground lug for additional grounding protection—a standard feature.
- Exportable cumulative station runtimes or flow usage on a daily, weekly or monthly basis from the web application for graphing or other user-defined purposes.
- Direct hand-held remote compatibility with Rain Master™ “Pro-Max UA” series with an EX-32 cable assembly or TRC™ “Commander” or “Sidekick” series for remote station operation by simply connecting to a 32-pin connector as a standard feature for all station counts.

2.4 Diagnostics and Alerts Detection

WeatherTRAK ET Pro²X Central will have:

- Eleven different alert functions inclusive of:
 - Flow conditions:

- High-flow
 - No-flow
 - Leak Detection
- Valve conditions:
 - Valve Shorts
 - Valve No-connects
- Communication:
 - Number of days since last ET update
 - Controller and web application not synchronized
- Water Window conflicts:
 - Water windows exceed Odd/Even day requirements or other site parameters
- Water Day conflicts:
 - Insufficient number of irrigation days to meet ET requirements
- Hardware conflicts:
 - Continual confirmation of terminal board operation
- ET Everywhere service subscription:
 - Notification of pending renewal of ET Everywhere Service

These alerts can be cleared via the controller interface with the exception of Communication errors and *WeatherTRAK ET Everywhere Service™* subscription; these can be resolved by calling WeatherTRAK's Customer Service at 800.362.8774. Water Window and Water Day Alerts are cleared automatically when programming changes are made.

2.5 Flow Monitoring Capabilities

The WeatherTRAK ET Pro²X Central controller will be capable of flow sensing and alert notification from a single flow meter and master valve as a standard feature. Flow requirements are as follows:

- Directly compatible with any one of the following Data Industrial® IR-220 Series Flow Sensors:
 - 1", 1.25", 1.50", 2.0", 3", 4" and "Insert-Type" flow sensors
- Directly compatible with Creative Sensor Technology Flow Sensors in available sizes
- Preloaded K and Offset values that correspond with the size of the flow sensor installed
 - User may adjust either value as needed
- Adjustable K and Offset values for special adaptations or "Insert-Type" models.
- The signal wire from the flow meter to the controller can be connected directly to a dedicated flow input terminal and pulses can be read directly from the flow meter without any intermediate devices.
- Adjustable high-flow, no-flow and leak detection thresholds independent from one another, including turning one or more flow monitoring function "Off". Note: Leak Detection Alert does not shut-off a normally open master valve until volumes exceed high flow thresholds.
- Selectable monitoring delay time from 1 to 6 minutes in 1-minute increments for each flow condition independent of one another.
- User-defined "excluded stations" from "No-flow" monitoring if some flow values are lower than the recommended flow rates of the flow meter installed.
- Real-time notification of three levels of flow sensing alerts:
 - High-flow
 - Leak Detection, during soak and cycle as well as non-scheduled irrigation periods
 - No-flow conditions

- High-flow, no-flow and leak detection thresholds are user-defined from 0-995 GPM. Thresholds can be set in 1-minute increments from 1-30 GPM and 5-minute increments from 30-995 GPM.
- WeatherTRAK ET Pro² Central can monitor a single station or multiple stations operating simultaneously based on selection of Stack or Overlap modes. The depletion model will continue to monitor those remaining stations that did not irrigate and will water these stations on the next scheduled active day and start time.
 - A High-Flow threshold alert is triggered when one or more stations (Stack vs. Overlap) flow values exceed the user-defined threshold. The corresponding station(s) and master valve are immediately closed and an alert notification is posted. The master valve is then opened and flows are monitored. If the threshold value is not exceeded, the controller will irrigate the next station(s) in the programming sequence and note the amount of irrigation remaining for the triggered station(s) as part of the depletion model. The user can define the delay time in which flow detection will begin for systems where long laterals or valve locations require flows to “hydraulically balance” before monitoring takes place.
 - When a station is scheduled to operate and No-Flow is observed after 1 minute, ET Pro²X Central will trigger a No-Flow alert and move to the next station in the irrigation schedule. If more than three successive stations are flagged as No-Flow, the controller will suspend remaining irrigation and immediately post a No-Flow alert to the controller and to the web application.
 - The ET Pro²X Central can monitor for leaks during non-scheduled irrigation or during soak periods when no other scheduled irrigation is operating. When the user-defined threshold value is exceeded, an alert notification is posted on the controller and the web application, but a normally open master valve is not closed until the high flow threshold is exceeded. Scheduled irrigation continues and the leak notification will continue to appear until the leak is repaired or until the threshold value is increased or leak detection is turned “Off”.

2.6 ET Operations

The WeatherTRAK ET Pro²X Central controller will have the capability of receiving daily ET values via *WeatherTRAK ET Everywhere Service™*. Weather data is collected from over 30,000 government-regulated and privately owned weather stations across the U.S. on a daily basis. Combined with local wind, temperature, solar radiation and humidity variables, this data is a proven scientific technique for validating local weather down to one square kilometer (Microzone) before ET updates are transmitted to the controller. The controller receives a broadcast ET value corresponding to its Microzone and adjusts all stations set to use ET.

The WeatherTRAK ET Pro²X Central controller will have the ability to incorporate daily ET Everywhere updates in two of the three program modes: 1) Auto mode with ET via depletion using crop coefficients (Kc) and 2) User mode w/ ET by setting reference ET and percent adjustments on a station-by-station basis, (User No ET does not incorporate ET Everywhere updates).

The WeatherTRAK Pro²X Central downloads the daily ET value and modifies each station’s runtime, water days (if “Optimized by WeatherTRAK” is selected), cycle and soak times based on the daily ET. When user-defined water days are selected using Automated by WeatherTRAK station mode, the controller will automatically decide whether to irrigate or not irrigate based on the current day’s ET and depletion of

each station independent of one another. The daily ET updates can be observed under the ET Menu and the impact of the data can be observed up to 8 weeks ahead under the Preview Menu function.

It is the combination of the controller's internal scheduling engine and daily ET updates that have demonstrated proven water savings, optimum plant health and runoff reduction (caused by over-irrigation) in multi-year independent studies. The WeatherTRAK Scheduling Engine incorporates the Irrigation Association's recognized methodology for irrigation listed in Best Management Practices (BMP's).

If an ET value is not received, the controller will continue to irrigate based on the last downloaded value. When an ET value is not received after four days, the controller will emit a beeping tone every 30 seconds signaling a Communication Alert. Communication can be easily restored by calling WeatherTRAK's Customer Service toll-free at 800.362.8774. In the event that ET service has expired and is not renewed, the controller will irrigate based on ET curves for that specific month until the ET value is updated. The controller may continue to operate in this mode or programming can be changed to User mode without ET.

2.7 Controller Operational Features and Options

WeatherTRAK ET Pro²X Central will offer the following:

- Individual station runtimes from 1-99 minutes in 1-minute increments.
- Preview mode for all station data displaying start times, water day patterns, station runtimes, cycles, soak times, percent adjust as well as flow information when programmed.
- Manual operation by specific or all stations from 1-99 minutes in 1-minute increments:
 - All manual station operation is independent of the depletion model
- Water windows ranging from 1-24 hours. Programs with start times before midnight may exceed this timeframe for odd/even day modes up to 24 hours:
 - For applications where the total station run time exceeds the user-defined water window, all stations will operate proportionately and stations with the highest level of remaining depletion will be given priority for the next scheduled irrigation day.
- User-definable Rain Pause from 1-200 days.
- Flow monitoring capability when used with a Data Industrial IR-220 Series or Creative Sensor Technology Flow Sensor Series.
- Compatibility with normally-closed rain, wind, freeze sensors capable of overriding all scheduled programming functions when activated.
- Compatibility with normally open or normally closed master valves with or without a flow meter that is user-defined in the Setup menu.
- Copy feature allows the user to copy all station data from one station to another or to all stations to accelerate programming process.
- The Percent Adjust feature by individual station ranges from -50% to +25% in 5% increments without altering start times or water windows; watering Day Frequency can be adjusted within the same range on a station-by-station basis.
- Ability to assign a pump station to any station output when needed; this assignment can be done outside of Max Active stations and once assigned, it will no longer has any station programming attributes.
- Continual web application to controller synchronization either automatically or manually as needed. Any controller changes will be automatically uploaded to the web application 10 minutes

after the last knob change or can be uploaded manually without any delay period. This function can also be completed manually. When controller changes are being made, the web application is “locked-out” until all changes are made and an upload to the web application occurs.

- The ability to export Station Runtime Usage, Alerts, Station Configuration and Flow Log Reports from the web application for graphing or other management requirements.
- Water budgeting feature allows user to view allocated water volumes and compare them against actual usage. This feature allows for budgeting a single controller from a single source or multiple controllers to a single source as defined by the user.
- Fast navigation between web pages via links. Extensive use of “filters” provides user the power to view information for a single controller or multiple controllers depending on application needs.
- Full remote controller programming, management, alert and reporting functions from the web application.

2.8 WeatherTRAK ET Pro²x Central HARDWARE AND ELECTRICAL

WeatherTRAK ET Pro²X Central will have:

- Surge protection on the 24V output board up to 4kV conforming to IEC 61000-4-5 standards.
- Optional AC input power surge protection as an accessory kit.
- On all station output boards, one LED per station output for diagnostics. 24V output voltage can be verified in valve test mode:
 - In this test, each station output LED will illuminate to indicate 24V output to the associated terminal output
- Station output modules available in 6-station increments, giving the ET Pro² Central flexible scalability for upgrading in the future as needed.
- Screw-less station output terminal strip sized for up to 10 Ga. wires for faster installation.
- Dedicated rain sensor and master valve terminals.
- Non-volatile memory to retain all programming information during a power outage for up to 10 years. Time and date will be retained for a period of 7-10 days.
- Input Power:
 - 120 VAC +/- 10%, (60 Hz) or 220 VAC +/- 10%, (60 Hz)
 - 0.50 Amps per station output (24 VAC)
 - Station Output Power: 24 VAC (60 Hz)
 - 0.50 Amps per station output (24 VAC) per station max
 - 0.50 Amps per station output (24 VAC) master valve/pump
 - Amps (80 VA) total load
- UL approved
- Chassis mounted ground lug for additional lightning protection—as a standard feature.
- A power input of 120 VAC, (+/-10%) 60 Hz and be capable of operating up to two 24 VAC solenoids per station while running a 24 VAC pump/master valve output circuit:
 - Total controller output will not exceed 3.0 amps (80 VA) at 24 VAC with 0.5 amps for the master valve/pump start
 - Power supply overload, back-up 3.0 amp slow-blow fuse.
 - Valve Short detection threshold are:
 - 600mA per station output (maximum allowable in-rush and holding current draw before a “Short” valve alert is triggered)
 - 800mA per master valve output (maximum allowable in-rush and holding current draw before a “Short” valve alert is triggered)

- Current draw below 75mA for both station outputs and master valve outputs before a “no-connect” or “open” circuit alert is triggered.

2.9 Direct Handheld Remote Compatibility

WeatherTRAK ET Pro² is compatible with RainMaster® Pro-Max UA Series and TRC “Commander” or “Sidekick” handheld remotes with a 32-pin connector as a standard “RI” or remote interface function as a standard feature.

2.10 Controller Enclosures

- The controller will be housed within a NEMA 3R-rated, weather-resistant, UL-listed enclosure with a key-locking entry.
- Enclosure material is 18 gauge, powder-coated cold-rolled steel finish.
- The command module will incorporate the main WeatherTRAK PCB with display, an optional two-way Central Internet Management communication PCB.
- Enclosure configurations will be available in wall and pedestal configurations in powder-coated cold-rolled steel finishes.
- Enclosure dimensions area (in inches, Width x Height) and shipping weights:
 - **Wall Mount – Powder-coated, Cold-rolled Steel:**
 - Wall Mount Enclosure – 12-30 stations, 12-1/2” W x 16” H x 5-3/4” D
 - Shipping weight – 21 lbs.
 - **Optional Pedestal – Powder-coated, Cold-rolled Steel Enclosure**
 - Light Duty Enclosure – 12-30 stations, 11-1/4” W x 28” H x 4-1/8” D.
 - Weight – 20 lbs.
- Chassis and enclosure models have a ground lug as a standard feature for additional lighting protection when specified or in regional areas where the incidence of lighting ground strikes is high. Install ground rods or ground plates in accordance with the American Society of Irrigation Consultants (ASIC) grounding specifications and details.

3.0 BASIC WeatherTRAK ET Pro²X Central PROGRAMMING

3.1 Controller Programming

WeatherTRAK ET Pro²X Central will have:

- Four programs with the ability to assign a single station or a group of stations to one of four program modes.
- Each program mode may be assigned one start time with up to 20 cycles per operating day (a second start is also available for High ET applications), one of five water day patterns (with day exclusion option), station runtimes, cycle and soak periods, and percent adjustment.

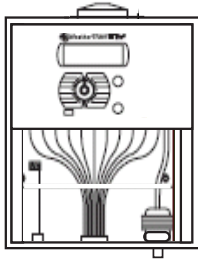
The following four program modes may be assigned to any one of the four programs:

- 1) **Automated by WeatherTRAK** – The WeatherTRAK Scheduling Engine will automatically calculate station runtimes, cycles, soak times and watering days and adjust these values based on the daily ET transmitted by the ET Everywhere Service. In this mode, the controller will prompt users for station-

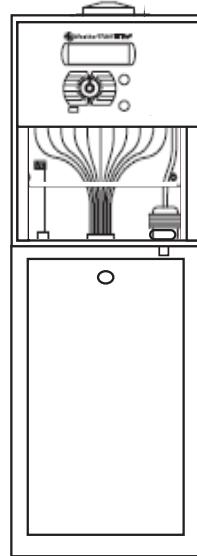
specific data. This mode will use a baseline 50% management allowable depletion (MAD)/soil moisture depletion model based on each plant type's root zone to determine the watering program. This baseline will be adjustable by customizing root depths on a station-by-station basis. Automatic mode input values will be:

- a) **Sprinkler Type** – Default and customizable precipitation rates and efficiency percentages used to automatically determine station runtimes. There are 14 sprinkler options.
 - b) **Precipitation Rates** – Will be customizable from 0.10" to 9.9" per hour.
 - c) **Sprinkler Efficiencies** – Will be customizable from 10% to 95% in 5% increments.
 - d) **Soil Type** – Five available soil types used to automatically calculate the required number of cycles and soak times to eliminate runoff and determine watering interval requirements.
 - e) **Plant Type** – There will be seventeen plant type choices, each with a default crop coefficient value (Kc) and root depth that will determine plant-specific watering needs. Three plant types can incorporate user-defined custom Kc's and root zone depths.
 - f) **Root Depth** – Associated with the selected plant material, root depth will be customizable from 2" to 36" in 1" increments. Root depth will be used along with daily ET in determining the water day intervals required for optimal soil moisture levels.
 - g) **Microclimate** – The amount of sunlight exposure that each valve location receives, microclimate will provide station-specific water adjustments. Four choices will be available.
 - h) **Slope Factor** – The amount of grade change within a station location will affect runtimes and cycle times to minimize runoff and maximize the infiltration of applied water to the plant's root zone. There are 5 gradient options.
 - i) **Sprinkler Location** – Where a slope is selected for a specified station, sprinkler location may affect watering times and cycles. There are four available settings.
 - j) **Useable Rainfall** – Where applicable, usable rainfall for individual stations can be selected as "None", meaning these stations *will* continue to irrigate if a Rain Pause or activated rain switch is in effect. If a station is set to a Useable Rainfall of 100%, it will *not* irrigate while in Rain Pause status or if a rain switch has been activated.
 - k) **Use Water Window** – The user may determine on a station-by-station basis if a particular station should abide to a programmed water window. An example of where this might be used is drip applications where a drip system can operate during the day without violating local water conservation ordinances.
- 2) **User Program with ET** – User-defined programs of watering days, station runtimes, cycles and soak durations. Station runtimes will be adjusted based on daily ET value transmissions from the ET Everywhere Service.
 - 3) **User Program No ET** – User-defined programs of watering days, station runtimes, cycles and soak durations. ET is not configured in this mode.
 - 4) **Off Mode** – This program mode will suspend irrigation at the specified station until the mode is changed. It will save the depletion level until irrigation resumes.

In All Program Modes – The user may select between Stack (operating programs sequentially) or Overlap modes (operating multiple programs with overlapping start times). Irrigation required but not completed in a given day (due to water window constraints or water window restrictions) will be carried over to the next allowable water day.



WeatherTRAK ET Pro²X
Wall Mount enclosure



WeatherTRAK ET Pro²X
Pedestal Style

Wall Mount and Pedestal Configurations

| Configuration | Material | Dimensions | Sta. Count | ET Pro ² X (one-way) | ET Pro ² XC (two-way) |
|---------------|---------------------------------|------------------------------|------------|--------------------------------------|---------------------------------------|
| Wall Mount | Powder-coated cold-rolled steel | 12" w x 16" h x 5-3/4" d | 12-30 | WTPro ² X<x>CWM-RI | WTPro ² XC<x>CWM-RI |
| Pedestal | Powder-coated cold-rolled steel | 11-1/4" w x 28" h x 4-1/8" d | 12-30 | WTPro ² X<x>CWM-RI-312PED | WTPro ² XC<x>CWM-RI-312PED |

* **Note:** insert station count number where the <x> is shown to specify model number.

Accessories

| Accessory | Description | Model Number |
|-------------------------------------|--|----------------|
| Central Internet Management Upgrade | Upgrades one-way ET Pro ² X with WeatherTRAK Central Internet Management capabilities | WTEXB-PRO2-CIM |
| Wired Rain Sensor | Comes w/ 25' of wire, | WT-RS |
| Wireless Rain Sensor | 500' range, 5 year battery life | WT-WRS |
| Wireless Rain Freeze Sensor | 500' range, settable freeze shut-off, 5-year battery life | WT-WRSF |
| AC Surge Protector Kit | Provides AC surge protection on the input side of the controller transformer | WT-SPK |
| Two-Way Pancake Antenna | Replacement two-way Pancake Antenna | 400-25 |
| One-Way Pancake Antenna | Replacement one-way Pancake Antenna | ANT-FLEX-PC |
| Antenna Amplifier Kit | Improves controller sensitivity for one-way models only | ANT-AMP-KIT |
| 6-station upgrade PCB | 6-station Terminal Output PCB | 306-KIT |
| Pedestal | Powder-coated cold-roll steel pedestal for ET Pro ² X series for retrofits or small mechanical spaces | 312PED |