IMMS
3.0

Hunter®

Central Control System

OPEN THE WINDOW TO YOUR WORLD

Hunter's Irrigation Management & Monitoring Software (IMMS) is a proven software package that makes computerized central control of irrigation affordable, usable, and comprehensible. Since 2003, the software and hardware have been intensively developed and refined into an irrigation command and control masterpiece.

With the IMMS 3.0 release, interactive map graphics (to station level) put the irrigation system manager in complete visual control of wide-area watering operations.

IMMS is a Microsoft Windows-based application that is compatible with Windows XP, Vista, and Windows 7 (32- or 64-bit operating systems).

Maps

The IMMS graphics update includes the ability to create one or more map views for control purposes. You can see where all of your irrigated locations are, and click any for a more detailed view or control purposes.

Ideal for orienting new employees, IMMS Graphics also simplifies life for busy irrigators with large numbers of assets to control. Use any background image to show the system, site, or controller area, and create control zones and station symbols that link to their command functions. You supply the pictures, and IMMS includes all the tools you need to create an interactive map-based system.

Programming

Each controller has its own complete setup and operations screens with tools to quickly and easily get the results you want. Eliminate the confusion and hassle of multiple field personnel setting up irrigation with dials and buttons. Shut off irrigation with a mouse click for emergencies. Access every function of controllers from simple spreadsheets or choosing from a menu of common functions and commands.

IMMS-ET historical reports
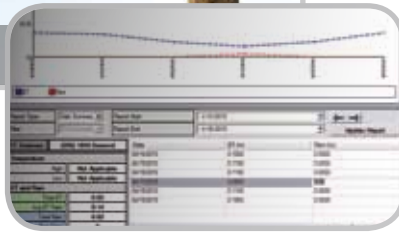
IMMS-ET (Evapotranspiration)

Take the guesswork out of irrigation amounts and daily adjustments for weather conditions. The optional IMMS-ET software add-on uses cost-effective local sensors, combined with your station database (for plant types, soil, precipitation rate, and more) to create water-saving irrigation programs for your whole system, every day.

IMMS-ET models the moisture level in soil reservoirs (including compensation for natural rainfall) and schedules just enough irrigation to replace what your plants need. IMMS-ET can track climate history according to your own sensors and document how it has responded with irrigation adjustments.

Alarm Management

IMMS reports all alarms, including over-currents, flow violations, communication issues, and water window violations, with individual date- and time-stamped messages. The IMMS operator knows the state of all irrigation controllers and valves at a glance, without driving around town to check individual sites. Printable reports can be exported to other formats or handed to work crews for investigation.

Connect up to 100 Sites, with up to 100 Controllers Each

A. Remote Site

Access with dial-up via cellular or landline connection
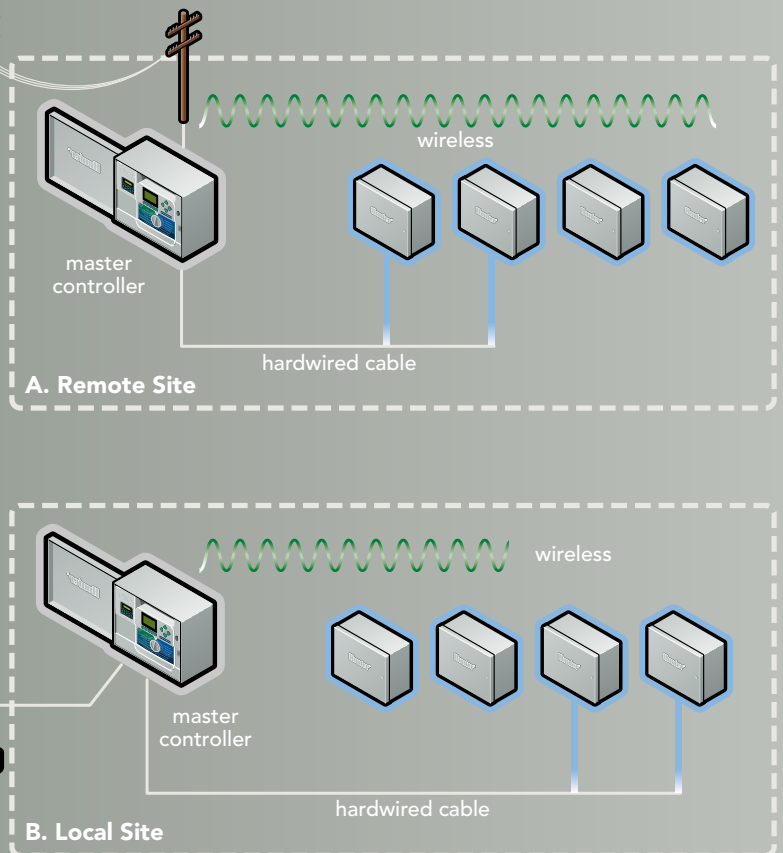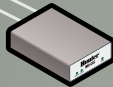
Share the link via hardwire cable or UHF radio

B. Local Site

Connect the first controller with cable via CCC interface

Share the link via hardwire cable or UHF radio

central computer

wireless

master controller

hardwired cable

A. Remote Site

wireless

master controller
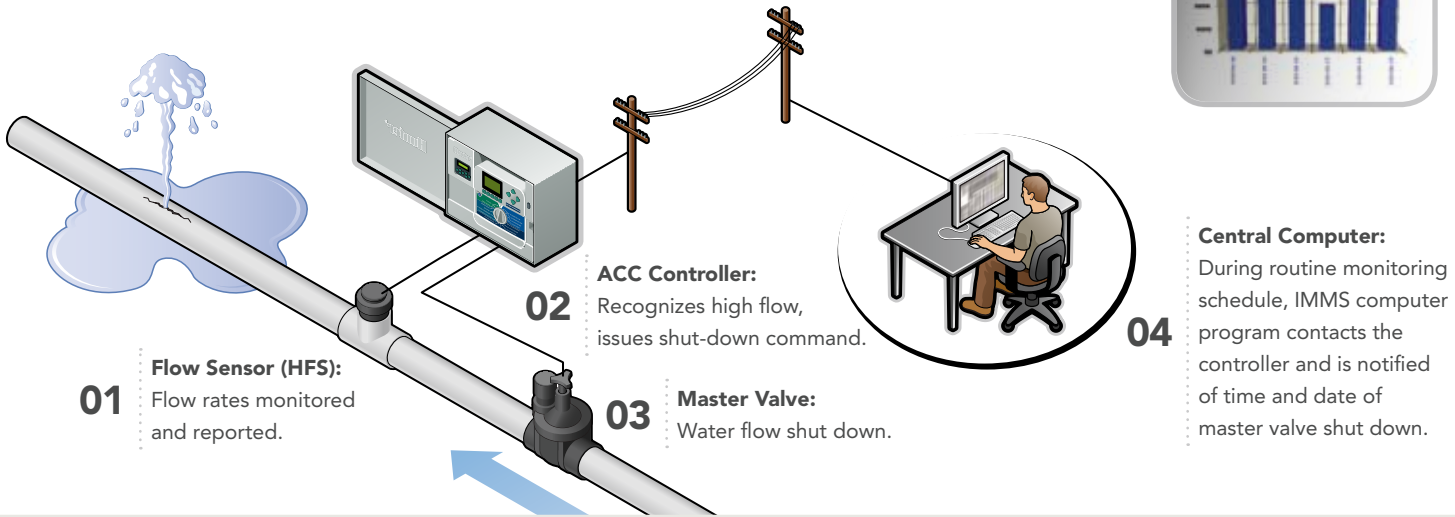
hardwired cable

B. Local Site

Flow Monitoring

Track your water usage, and spot plumbing problems a mile away (or several hundred miles away). IMMS is built around the powerful ACC controller platform, which includes real-time flow monitoring. With a flow meter and normally-closed master valves, the ACC detects incorrect flow conditions and moves swiftly to isolate the offending valves. Each flow violation is reported to the central software, after the controller has finished its own diagnostics. Leaks, breaks, and flooding are minimized, and the irrigation manager is the first to know of any issues.

IMMS also tracks total water usage by site, controller, program, and station. Keep detailed historical records, and go home each day with the peace of mind that automatic flow monitoring gives.

01 Flow Sensor (HFS): Flow rates monitored and reported.

02 ACC Controller: Recognizes high flow, issues shut-down command.

03 Master Valve: Water flow shut down.

04 Central Computer: During routine monitoring schedule, IMMS computer program contacts the controller and is notified of time and date of master valve shut down.

Case Study:
IMMS in Sports Turf Application

"We spent $15,000 and it saved $55,000," says Grounds Manager Chris Ralston of the IMMS-ET at his baseball stadium in Lake Elsinore, CA. Now with the Sacramento River Cats, the AAA team for the Oakland Athletics, Ralston is making sure the capital city sees the same kind of savings.

Ralston needs a good system: In Sacramento, he has 82 irrigation zones, including turf, rosebeds, shrubbery, and trees. His four-employee operation (plus 20 seasonal workers) has to keep everything green for the 72 home games plus numerous concerts and events that the stadium hosts. So simplicity is key, and Ralston relies on the IMMS-ET.

"I think the best feature is the fact that it has an ET sensor on it," says Ralston. With IMMS-ET, everything is on-site and acts as a weather station.

Ralston explains the system's ease of use was a factor in his purchase decision.

"We have five clocks on site and it puts all five on them on one screen. I pick the start time and the computer does everything for me," he says. "I double check it, but the fact that it hasn't failed me, the grass is green and I'm saving 15 to 20 percent on water use means it's hard to go wrong."

Sacramento River Cats baseball stadium in Sacramento, California

Specifications

SOFTWARE MODELS

- **IMMS3CD:** Central control software on CD, compatible with Microsoft Windows 7, Vista, and XP (requires minimum 512 Mb RAM and 1024 x 768 graphics resolution). Map images (not supplied) can be JPG, GIF, TIF, BMP, or PNG file formats.

- **IMMS-ET:** Optional ET water savings software add-on (requires one or more ET Sensors).

COMPATIBLE CONTROLLERS

- **ACC-1200 and derivatives,** with communications modules (see on this page).

- **ACC99D and derivatives,** with communications modules (see on this page).

- **ICC, Pro-C, and SRC** may be added to IMMS systems with reduced features (using SI/CI interfaces) via the SmartPort® connection.

COMMUNICATIONS OPTIONS

IMMS central control may communicate via hardwired cable, professional two-way radio, dial-up telephone, and GSM cell phone. Other possibilities may exist in particular installations; check with Hunter Technical Support for specific applications.

- **ACC-COM-HWR:** Radio and hardwire connection only

- **ACC-HWIM:** Hardwire interface terminal

- **RAD3:** UHF radio (license required)

- **ACC-COM-POTS:** Dial-up telephone

- **ACC-COM-GSM:** GSM cell phone

- **ACC-COM-GSM-E:** GSM cell phone, international

See Hunter System Design Guide for details or consult with Hunter Technical Support for specific applications.

- **IMMS-SI- (HW or MOD):** Site interface for SmartPort controller connection.

- **IMMS-CI-HW:** Controller interface for SmartPort controller connections.

ACCESSORIES

- **ET Sensor:** Weather sensor for IMMS-ET, add as needed (1 per microclimate) to ACC controllers, includes sensors for solar, temperature, humidity, and rain.

- **ET Wind:** Optional sensor for local wind speed.

- **HFS:** Hunter Flow Sensor (1 per ACC controller) for flow monitoring. Use with FCT fittings for pipe diameter.

MODELS	DESCRIPTION	NOTES
IMMS3CD	IMMS 3 Graphics central control software	Custom images not included
IMMS-ET-CD	Optional ET automatic weather adjustment software (requires IMMS3CD base model)	Requires 1 or more ET Sensors at ACC controller locations

COMMUNICATION OPTIONS		SPECIFY SEPARATELY
MODELS	**OPTIONS**	**PURPOSE**
ACC-COM-HWR = Hardwire/radio module	(blank) = No option	Supports hardwire and radio communication options
ACC-COM-POTS = Dial-up modem module (also supports radio & hardwire)		Supports dial-up telephone line input, in addition to hardwire and radio communication sharing
ACC-COM-GSM = CSD cellular module (also supports radio & hardwire)	E = International frequencies	Supports GSM mobile input, in addition to hardwire and radio communication sharing (cell service required)

EXAMPLES

ACC-COM-HWR	Hardwire/radio module
ACC-COM-POTS	Dial-up modem module
ACC-COM-GSM - E	CSD cellular module for international frequencies

USER INSTALLED OPTIONS		SPECIFY SEPARATELY
MODELS	**DESCRIPTION**	**PURPOSE**
ACC-HWIM	Hardwire interface module, required for hardwire connections	Provides surge protected terminals for hardwired cable connections
RAD3	UHF radio module (North America), 450-470 MHz	UHF radio module for wireless connections (license and antenna required and not included)
RAD460INT	UHF radio module (international), 440-480 MHz Consult factory for other international frequency ranges	UHF radio module for wireless connections, international only (license and antenna required and not included)
APPBRKT	Communication bracket for plastic pedestals	Holds com modules and accessories in plastic pedestal (not required in wall mounts)

RADIO ANTENNA OPTIONS	SPECIFY SEPARATELY
MODELS	**DESCRIPTION**
IMMSANT2	Omni-directional antenna for plastic pedestal lid installation
IMMSANT3	Omni-directional antenna for wall or pole mount installation
IMMSANTYAGI3	High efficiency directional antenna for pole installation
RA5M	High gain omni-directional mast antenna for roof or pole installations