IMMS®

FEATURES

- Windows®-based programming and communications software
- Total control of each controller's functions
- Graphical user interface with customisable map-based navigation
- Map utility allows direct import of linework and layers
- Flow monitoring and reporting with Hunter ACC controllers
- Alarm reporting and detailed irrigation history reports
- Wireless and hardwired communication options, including Ethernet and GPRS
- Controller sharing of communications channels to reduce communications costs
- Compatible with water-saving Hunter Solar Sync® sensors, or optional ET Sensors

KEY SPECIFICATIONS

- Operating system: Microsoft® Windows XP, Vista, Windows 7, Windows 8*
- Minimum RAM: 512 MB
- Minimum screen resolution: 1,024 x 768
- Storage: At least 100 MB disk space

* Windows is a registered trademark of the Microsoft Corporation

COMPATIBLE CONTROLLERS

- IMMS is optimised for the Hunter ACC controller and accessories (including decoder controllers)

COMPATIBLE SENSORS

- **Flow-Sync®:** Hunter Flow-Sync sensor for ACC controllers (one per controller). Provides flow total reporting and flow alarm monitoring with diagnostic shutdowns in real time.
- **Clik Sensors**: Each controller requires its own rain sensor for fast rain shutdowns. All Hunter Clik sensors are compatible with ACC and other Hunter controllers.
- **ET Sensor**: ET Sensor platform is for use with IMMS-ET software. ET Sensor is added to selected ACC controllers, to report local conditions. This local ET data has no additional monthly charges and can be shared through the software to create schedules for other controllers in the same micro-climate. Add as many ET Sensors as needed to sample all micro-climates.
- **Solar Sync Sensor** (wired or wireless): Each controller can use its own SOLARSYNCSEN or WSS-SEN for smart, water-saving self-adjustment. Solar Sync sensors also provide rain and freeze shutoff functions. Solar Sync compatibility is included with the basic IMMS4CD software.

IMMS SOFTWARE	
Model	**Description**
IMMS4CD	IMMS Graphics central control software
IMMS-ET-CD	Optional ET automatic weather adjustment software *(requires IMMS4CD base model)*

Track flow and other vital statistics in both charts and spreadsheets

Station level symbols can be positioned over background images from any source

Flow-Sync
Impeller-type flow meter, requires FCT for pipe installation

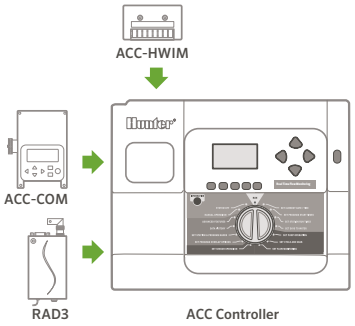
ET Sensor
Height: 27 cm
Width: 18 cm
Depth: 31 cm

Wireless Solar Sync Sensor
(w/mounting arm)
Height: 11 cm
Width: 22 cm
Depth: 2.5 cm

COMMUNICATION OPTIONS FOR ACC INTERFACE

Model	Purpose
ACC-COM-HWR = Hardwire/radio module*	Supports hardwire and radio communication options
ACC-COM-LAN = Ethernet module*	Supports TCP/IP in Ethernet networks in addition to hardwire and radio sharing with local controllers
ACC-COM-GPRS-E = GPRS cellular data module*	Supports mobile data connection via GPRS phone in addition to hardwire and radio sharing with local controllers

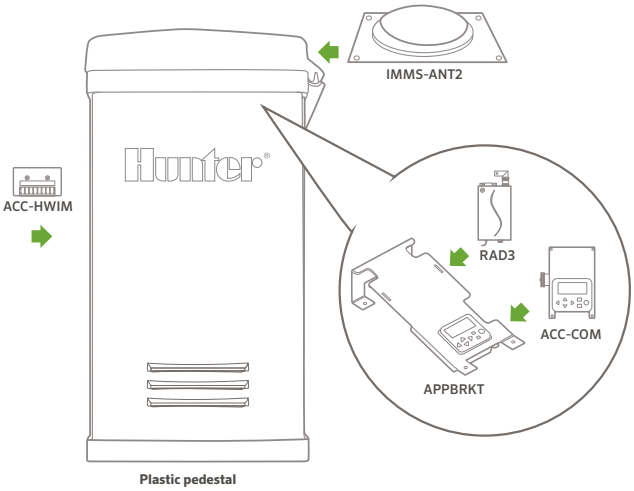
Note:
* Also supports radio and hardwire



ACC wall mount communication components

RADIO ANTENNA OPTIONS (SPECIFY SEPARATELY)

Model	Description
IMMS-ANT2	Omni-directional antenna fits ACC plastic pedestal lid
IMMS-ANT3	Omni-directional antenna for wall- or pole-mount
IMMS-ANTYAGI3	High efficiency directional antenna for pole-mount
RA5M	High gain omni-directional mast antenna for roof- or pole-mount



ACC plastic pedestal communication components

USER-INSTALLED OPTIONS (SPECIFY SEPARATELY)

Model	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 (licence 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 (licence 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)

Model	Description	Options	Purpose
IMMS-CCC	Hardwire Central Interface	None = 120 VAC (North America) E = 230 VAC (Europe/international power) A = 230 VAC (Australia)	Hardwired central interface for connection to site via direct wire (GCBL cable), supplied with USB cable for connection to central computer, and plug-in transformer
GCBL*	100 = 30 m 300 = 90 m 500 = 150 m		Cable for all IMMS hardwired communications

Note:
* GCBL available in 300 m increments (up to 1,200 m)

SPECIFICATIONS

- ACC-COM-HWR, LAN, GPRS-E
- 8 cm x 11 cm x 4.5 cm
- Powered internally by controller
- Mounted internally to ACC controller
- RAD3, RAD460INT: 450-470 MHz, UHF Radios, Power Output: 1 Watt, Bandwidth: 12.5 kHz narrowband
- ACC-HWIM: Hardwire interface module for 4-20 mA loop communications, includes 8 colour-coded terminals for GCBL connection, installs inside ACC controller cabinets or pedestals
- ACC-COM-LAN requires fixed IP address from system administrators
- ACC-COM-GPRS-E requires a monthly service plan

HARDWIRE COMMUNICATIONS CABLE

- GCBL shielded, two twisted-pair 1 mm^2 wire with ground wire, up to 3,000 m between each device

SYSTEM CONFIGURATIONS (ACC CONTROLLERS)

1. **Determine how you will reach the first controller on each site**
   - Hardwire cable: Add one IMMS-CCC at the computer, and ACC-COM-HWR plus one ACC-HWIM at the controller
   - Ethernet local area network: Add ACC-COM-LAN at the controller, and connect to the network (RJ-45 jack)
   - GPRS cell phone: Add ACC-COM-GPRS-E to controller (requires GPRS coverage and service contract)
2. **Determine how that first controller will reach the other controllers on the site**
   - If by radio, add one RAD3 (US) or RAD460INT (international) plus antenna to the controller
   - If by hardwire cable, add one ACC-HWIM (if it is not already present as in 1)
3. **Equip the other controllers. Add one ACC-COM-HWR to each controller, plus:**
   - One ACC-HWIM when hardwire connection will be necessary
   - One RAD3 plus antenna when radio connections are necessary

SAMPLE CONFIGURATIONS

- Many other configurations possible; consult Hunter Technical Support or System Design Guide for details.