



## CWM MODULAR CONTAINER IRRIGATION SYSTEM



Get maximum flexibility with CWM container irrigation modules. Use 1 to 5 units to make up systems for virtually any container. The vacuum/sensor system keeps plants at their optimal moisture levels, and the oversize modules provide enough water to allow extended watering.

### OVERVIEW

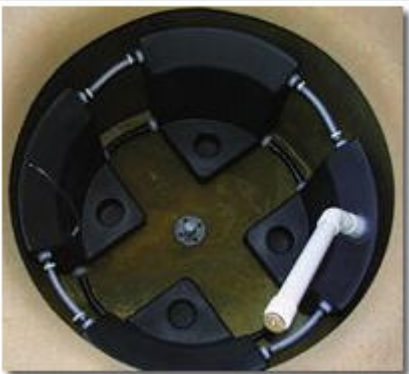
CWM Modular™, manufactured by Tournesal Siteworks, is a versatile container irrigation system designed for use in any large planter, freestanding or otherwise. The hand-filled reservoir system can go 2-3 weeks between fillings. It utilizes Planter Technology's exclusive vacuum-sensor system to precisely monitor the soil moisture in the container, giving plants exactly the amount of water they need (see below). The CWM provides optimal flexibility for use in virtually any shape planter, will not interfere with lighting or other electrical connections, and requires no plumbing. With the use of a overflow drainage adapter CWM can control run-off of irrigation water – no more overflowing saucers or stained pavers.

### HOW IT WORKS

The CWM system consists of several oversize reservoir modules connected together with flexible tubing. It is filled by hand every 2-3 weeks. The fill hole is closed with our exclusive tamper-resistant cap, creating an airtight seal. The upper connecting tubes allow air and vacuum to be transmitted to all modules, the lower connecting tube passes water between the units.

When the soil is dry, the porous moisture sensor allows air to pass through the tube into the reservoir, permitting water to flow into the soil through the holes in the bottom of the "cup" in the CWM. This water wicks up through the soil, watering the plant.

Overflow drainage adapter prevents discharge of irrigation water



As the soil becomes moist, the sensor (planted \_ to 1/3 way down in the container) absorbs water. It closes like a valve, preventing air from passing through the tube. A vacuum is created above the reservoir, preventing further watering until the soil dries again.

The overflow drainage adapter allows excess water that builds up (typically rainwater) to escape without disrupting the system. Under plantings, after a short acclimation period typically may be watered on the same cycle as the primary planting.

### COMPONENTS OF THE CWM™ MODULAR

**Fill Module** – An adjustable height fill tube allows use of a garden hose or watering wand. One fill module is required in each system.

**Sensor Module** – The "brains" of the CWM, one unit is needed in each system. Precisely controls water provided to the plant based upon the soil moisture level.

**Secondary Module** – Intermediate units hold irrigation water. Quantity depends upon size and requirements of planter. Up to 4 units for each system.

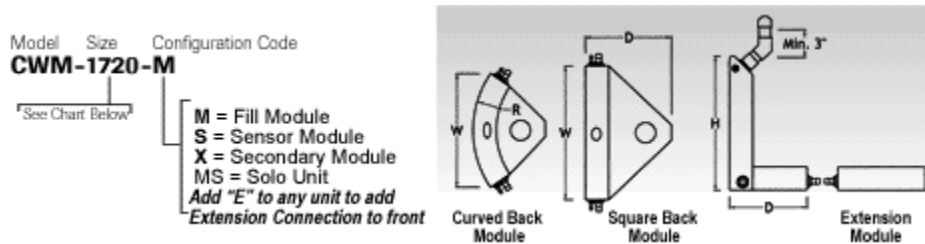
**Extension Module** – A flat module for very large containers. Connected to the front of a CWM.

**Connections** – Braided flexible PVC tubing and quick-snap nylon hose clamps provide a reliable seal between each module.

**Overflow Drainage Adapter** – Sealed over each drainage hole in the planter to keep irrigation water in, allow rainwater out.

## SPECIFICATIONS

### SPECIFYING CWM CONTAINER IRRIGATION



Model	Description	Type
CWM-1109-MS	Small curve-back solo module 9" tall - .8 gal. water capacity	Round-Back
CWM-1109-2k	2 small curve-back modules 9" tall- 1.6 gal. water capacity	Round-Back
CWM-1109-3k	3 small curve-back modules 9" tall - 2.4 gal. water capacity	Round-Back
CWM-1109-4k	4 small curve-back modules 9" tall - 3.2 gal. water capacity	Round-Back
CWM-1114-MS	Small curve-back solo module 14" tall - 1.2 gal. water capacity	Round-Back
CWM-1114-2k	2 small curve-back modules 14" tall - 2.4 gal. water capacity	Round-Back
CWM-1114-3k	3 small curve-back modules 14" tall - 3.6 gal. water capacity	Round-Back
CWM-1114-4k	4 small curve-back modules 14" tall - 4.8 gal. water capacity	Round-Back
CWM-1120-MS	Small curve-back solo module, 20"h, 1.8 gal water capacity	Round-Back

CWM-1120-2k	2 small curve-back modules, 14"h, 3.6 gal water capacity	Round-Back
CWM-1120-3k	3 small curve-back modules, 14"h, 5.4 gal water capacity	Round-Back
CWM-1120-4k	4 small curve-back modules, 14"h, 7.2 gal water capacity	Round-Back
CWM-1714-MS	Medium curve-back solo module 14" tall - 3 gal. water capacity	Round-Back
CWM-1714-2k	2 medium curve-back modules 14" tall - 6 gal. water capacity	Round-Back
CWM-1714-3k	3 medium curve-back modules 14" tall - 9 gal. water capacity	Round-Back
CWM-1714-4k	4 medium curve-back modules 14" tall - 12 gal. water capacity	Round-Back
CWM-1714-5k	5 medium curve-back modules 14" tall - 15 gal. water capacity	Round-Back
CWM-1720-MS	Medium curve-back solo module 20" tall - 4.25 gal. water capacity	Round-Back
CWM-1720-2k	2 medium curve-back modules 20" tall - 8.5 gal. water capacity	Round-Back
CWM-1720-3k	3 medium curve-back modules 20" tall - 12.75 gal. water capacity	Round-Back
CWM-1720-4k	4 medium curve-back modules 20" tall - 17 gal. water capacity	Round-Back
CWM-1720-5k	5 medium curve-back modules 20" tall - 21.25 gal. water capacity	Round-Back
CWM-2914-MS	Large curve-back solo module 14" tall - 7.5 gal. water capacity	Round-Back
CWM-2914-2k	2 large curve-back modules 14" tall - 15 gal. water capacity	Round-Back
CWM-2914-3k	3 large curve-back modules 14" tall - 22.5 gal. water capacity	Round-Back

	gal. water capacity	
CWM-2914-4k	4 large curve-back modules 14" tall - 30 gal. water capacity	Round-Back
CWM-2914-5k	5 large curve-back modules 14" tall - 37.5 gal. water capacity	Round-Back
CWM-2914-5kE	5 large curve-back modules and 1 extension module 14" tall - 38.5 gal. water capacity	Round-Back
CWM-2920-MS	Large curve-back solo module 20" tall - 9.75 gal. water capacity	Round-Back
CWM-2920-2k	2 large curve-back modules 20" tall - 19.5 gal. water capacity	Round-Back
CWM-2920-3k	3 large curve-back modules 20" tall - 29.25 gal. water capacity	Round-Back
CWM-2920-4k	4 large curve-back modules 20" tall - 39 gal. water capacity	Round-Back
CWM-2920-5k	5 large curve-back modules 20" tall - 48.75 gal. water capacity	Round-Back
CWM-2920-5kE	5 large curve-back modules and 1 extension module 20" tall - 50.75 gal. water capacity	Round-Back
CWM-R1109-MS	Small square-back solo module 9" tall - 1.3 gal. water capacity	Square Back
CWM-R1109-2k	2 small square-back modules 9" tall - 2.60 gal. water capacity	Square Back
CWM-R1109-3k	3 small square-back modules 9" tall - 3.9 gal. water capacity	Square Back
CWM-R1109-4k	4 small square-back modules 9" tall - 5.2 gal. water capacity	Square Back
CWM-R1114-MS	Small square-back solo module 14" tall - 2 gal. water capacity	Square Back
CWM-R1114-2k	2 small square-back modules 14" tall - 4 gal. water capacity	Square Back

R1114-2k	modules 14" tall - 4.0 gal. water capacity	Back
CWM-R1114-3k	3 small square-back modules 14" tall - 6.0 gal. water capacity	Square Back
CWM-R1114-4k	4 small square-back modules 14" tall - 8 gal. water capacity	Square Back
CWM-R1120-MS	Small square-back solo module, 20"h, 2.3 gal water capacity	Square Back
CWM-R1120-2k	2 small square-back modules, 20"h, 4.6 gal water capacity	Square Back
CWM-R1120-3k	3 small square-back modules, 20"h, 6.9 gal water capacity	Square Back
CWM-R1120-4k	4 small square-back modules, 20"h, 9.2 gal water capacity	Square Back
CWM-R1614-MS	Medium 16" square-back solo module, 14"h, 3 gal water capacity	Square Back
CWM-R1614-2k	2 medium 16" square-back modules, 14"h, 6 gal water capacity	Square Back
CWM-R1614-3k	3 medium 16" square-back modules, 14"h, 9 gal water capacity	Square Back
CWM-R1614-4k	4 medium 16" square-back modules, 14"h, 12 gal water capacity	Square Back
CWM-R1614-5k	5 medium 16" square-back modules, 14"h, 15 gal water capacity	Square Back
CWM-R1620-MS	Medium 16" square-back solo module, 20"h, 4.25 gal water capacity	Square Back
CWM-R1620-2k	2 medium 16" square-back modules, 20"h, 8.5 gal water capacity	Square Back
CWM-R1620-3k	3 medium 16" square-back modules, 20"h, 12.75 gal water capacity	Square Back
CWM-R1620-4k	4 medium 16" square-back modules, 20"h, 17 gal water capacity	Square Back

CWM-R1620-5k	5 medium 16" square-back modules, 20"h, 21.25 gal water capacity	Square Back
CWM-R2014-MS	Medium 20" square-back solo module 14" tall - 4.6 gal. water capacity	Square Back
CWM-R2014-2k	2 medium 20" square-back modules 14" tall - 9.2 gal. water capacity	Square Back
CWM-R2014-3k	3 medium 20" square-back modules 14" tall - 13.8 gal. water capacity	Square Back
CWM-R2014-4k	4 medium 20" square-back modules 14" tall - 18.4 gal. water capacity	Square Back
CWM-R2014-5k	5 medium 20" square-back modules 14" tall - 23 gal. water capacity	Square Back
CWM-R2020-MS	Medium 20" square-back solo module 20" tall - 5.7 gal. water capacity	Square Back
CWM-R2020-2k	2 medium 20" square-back modules 20" tall - 11.4 gal. water capacity	Square Back
CWM-R2020-3k	3 medium 20" square-back modules 20" tall - 17.1 gal. water capacity	Square Back
CWM-R2020-4k	4 medium 20" square-back modules 20" tall - 22.8 gal. water capacity	Square Back
CWM-R2020-5k	5 medium 20" square-back modules 20" tall - 29.7 gal. water capacity	Square Back
CWM-R2914-MS	Large square-back solo module 14" tall - 9 gal. water capacity	Square Back
CWM-R2914-2k	2 large square-back modules 14" tall - 18 gal. water capacity	Square Back
CWM-R2914-3k	3 large square-back modules 14" tall - 27 gal. water capacity	Square Back

CWM-R2914-4k	4 large square-back modules 14" tall - 36 gal. water capacity	Square Back
CWM-R2914-5k	5 large square-back modules 14" tall - 45 gal. water capacity	Square Back
CWM-R2914-5kE	5 large square-back modules and 1 extension module 14" tall - 46 gal. water cap.	Square Back
CWM-R2920-MS	Large square-back solo module 20" tall - 10.4 gal. water capacity	Square Back
CWM-R2920-2k	2 large square-back modules 20" tall - 20.8 gal. water capacity	Square Back
CWM-R2920-3k	3 large square-back modules 20" tall - 31.2 gal. water capacity	Square Back
CWM-R2920-4k	4 large square-back modules 20" tall - 41.6 gal. water capacity	Square Back
CWM-R2920-5k	5 large square-back modules 20" tall - 52 gal. water capacity	Square Back
CWM-R2920-5kE	5 large square-back modules and 1 extension module 20" tall - 54 gal. water cap.	Square Back

#### **SPECIFICATION GUIDELINES**

Each system needs one fill module and one sensor module. For solo units, these are combined (use the configuration code "MS").

One fill module and one sensor module can support up to 4 secondary modules. For containers where more are required, break into two separate systems.

Modules in system must be the same height. Otherwise shapes and sizes may be mixed where needed.

#### **ACCESSORIES**

**BPVC-75** Reinforced tubing for connections

**AC-75** Nylon quick-snap clamps for all connections

**F-7590** Plastic elbow connector for square, CRT Configurations.

**BG25P** Bio Guard fabric to keep roots from growing into reservoir. One per "cup"

**P-75** Plug for end units – connection.