

SECTION 07:
SENSORS

SOLAR SYNC®

Sensor: **ET/Rain/Freeze**

FEATURES

- Provides automated daily weather adjustment to program run times
- Wired and wireless models available
- Solar Sync may be used in IMMS central installations
- Rain and Freeze shutoff
- Gutter mount bracket included
- Compatible with all Hunter AC powered controllers
- Warranty period: 5 years (10 year battery warranty for wireless model)

SPECIFICATIONS

- Maximum distance sensor to module: 60 m (wired model) or 240 m (wireless model)
- 12 m of wire included in kit (wired model)
- Rain and Freeze sensor shutdown capability included

APPROVALS

- FCC, CE



Solar Sync Sensor
(w/mounting arm)
Height: 8 cm
Width: 22 cm
Depth: 2 cm



Solar Sync Module
Height: 4 cm
Width: 13 cm
Depth: 2 cm



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



Wireless Solar Sync Receiver
Height: 14 cm
Width: 4 cm
Depth: 4 cm

SOLAR SYNC

Model	Description
SOLAR-SYNC	Solar Sync kit for use with PCC and Pro-C 300 controllers. <i>Includes Solar Sync Sensor and module.</i>
SOLAR-SYNC-SEN	Wired Solar Sync for use with ACC, I-Core®, new Pro-C® 400/PCC Series, and X-Core® controllers. <i>Includes Solar Sync Sensor only.</i>
WSS	Wireless Solar Sync for use with PCC and Pro-C 300 controllers. <i>Includes Wireless Solar Sync Sensor, Wireless receiver, and module.</i>
WSS-SEN	Wireless Solar Sync for use with ACC, I-Core, new Pro-C 400/PCC Series, and X-Core controllers. <i>Includes wireless Solar Sync Sensor and wireless receiver.</i>



SOIL-CLIK®

Sensor: **Soil Moisture**

FEATURES

- Soil moisture level and status at a glance
- Shuts down irrigation when desired moisture level has been reached
- One-touch override allows soil moisture bypass for special conditions
- Low voltage outdoor enclosure powered by host controller
- Simple installation allows probe to be up to 300 m from controller
- Connect to Hunter sensor inputs, or use to interrupt common wires in virtually any 24 VAC irrigation system
- Use with X-Core®, Pro-C® and I-Core®, and ACC Clik sensor inputs
- Ideal companion sensor to Solar Sync®
- Warranty period: 5 years

SPECIFICATIONS

- Max distance, control module to controller: 2 m
- Max distance, control module to sensor probe: 300 m
- Input power: 24 VAC, 100mA max.
- Output: Normally-closed dry contact closure
- Enclosure: NEMA 3R, indoor/outdoor

SOIL-CLIK Module

Height: 11.4 cm
 Width: 8.9 cm
 Depth: 3.2 cm
 Power: 24 VAC, 100mA max.
 Wire Leads: 80 cm



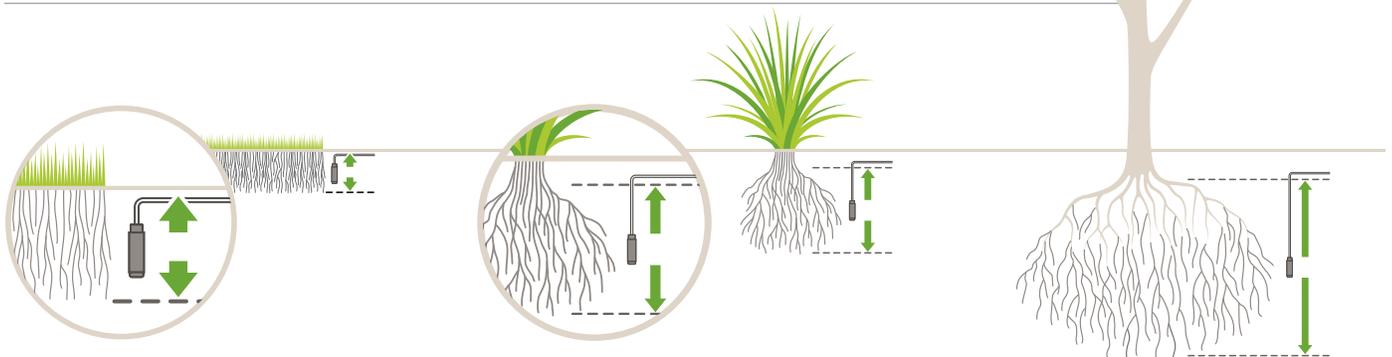
SOIL-CLIK Probe

Diameter: 2 cm
 Height: 8.3 cm
 Wire to Probe: 300 m max.
 1 mm² Direct Burial Wire
 Wire Leads: 80 cm



SOIL-CLIK	
Model	Description
SOILCLIK	Soil-Clik moisture sensor module and probe

Probe installed in root zone to monitor soil moisture



In turf applications, the probe should be placed in the root zone, approximately 15 cm deep (adjust for actual turf conditions).

For shrubs or trees, select a deeper depth that matches the root zone. For new plantings, choose a spot halfway down the root ball, adjacent to native soil.

SENSORS

RAIN-CLIK®

Sensor: **Rain**

FEATURES

- Quick Response™ feature shuts the system off as soon as it starts raining
- Maintenance-free design with 10-year battery life for Wireless Rain-Clik
- Adjustable vent ring allows for setting of reset delay
- Rugged polycarbonate housing and metal extension arm
- Rain-Clik includes 7.6 m of 0.5 mm² sheathed, two-conductor, UL-approved wire
- Wireless unit available with 244 m range from wireless sensor to receiver
- Compatible with most controllers
- Warranty period: 5 years (10 year battery warranty for wireless model)

SPECIFICATIONS

- Wiring: “normally-open” or “normally-closed”
- Time to turn off irrigation system: 2 to 5 minutes approx. for Quick Response
- Time to reset Quick Response: 4 hours approx. under dry, sunny conditions
- Time to reset when fully wet: 3 days approx. under dry, sunny conditions
- Switch rating: 24 VAC, 3 A
- Freeze sensor shuts system off when temperatures fall below 3° C (Rain/Freeze-Clik model)
- System operating frequency: 433 MHz (wireless model)
- Communication range up to 240 m line of sight (wireless model)
- Receiver input power: 24 VAC (from controller)

APPROVALS

- UL listed, FCC approved, cUL, CSA, CE, suitable for use in Australia



RAIN-CLIK
Height: 6 cm
Length: 18 cm



WR-CLIK-TR
Height: 7.6 cm
Length: 20 cm



WR-CLIK-R
(Receiver)
Height: 8.3 cm
Length: 10 cm



SGM
Optional gutter mount

RAIN-CLIK

Model	Description
RAIN-CLIK	Rain-Clik sensor
RFC	Rain/Freeze-Clik sensor
WR-CLIK	Wireless Rain-Clik system
WR-CLIK-TR	Wireless Rain-Clik Transmitter (only)
WRF-CLIK	Wireless Rain/Freeze-Clik system
WR-CLIK-R	Wireless Rain Receiver (only)

USER INSTALLED OPTION (SPECIFY SEPARATELY FROM CONTROLLER)

Model	Description
SGM	Optional gutter mount (included in the WRF-CLIK)

SENSORS

MINI-CLIK®

Sensor: **Rain**

FEATURES

- Easily installs on any automatic irrigation system
- Debris tolerant for reliable operation and no unnecessary shutdowns
- Can be set to shut system off from 3 mm to 25 mm of rainfall
- Includes 7.6 m of 0.5 mm² sheathed, two-conductor, UL-approved wire
- Optional user-installed metal gutter mount for Mini-Clik (order SGM, Includes Mini-Clik)
- Warranty period: 5 years

SPECIFICATIONS

- Switch rating: 24 VAC, 5 A
- Wiring: 0.5 mm², typically interrupts the common ground wire between the solenoid valves and controller



MINI-CLIK
Height: 5 cm
Length: 15 cm



SG-MC
Stainless steel sensor guard enclosure for Mini-Clik. Includes Mini-Clik.



SGM
Optional gutter mount

MINI-CLIK®	
Model	Description
MINI-CLIK	Rain Sensor
MINI-CLIK-NO	Rain Sensor with “normally-open” switch
MINI-CLIK-C	Rain Sensor with conduit mount
MINI-CLIK-HV	Rain Sensor for high voltage application (120/230 VAC)

FREEZE-CLIK®

Sensor: **Freeze**

FEATURES

- Installs easily with no adjustment needed
- Accurate temperature sensing shuts system off when air temperature reaches 3° C
- Used with other sensors to enhance overall efficiency of irrigation systems
- Warranty period: 5 years

SPECIFICATIONS

- Switch rating: 24 VAC, 5 A
- Wiring: Typically interrupts the common ground wire between the solenoid valves and the controller
- UL listed

* Not intended for agricultural applications



FREEZE-CLIK
Height: 5 cm
Length: 11 cm

FREEZE-CLIK®	
Model	Description
FREEZE-CLIK	Freeze sensor interrupts irrigation when temperatures drop below 3° C
FREEZE-CLIK REV	Freeze sensor allows irrigation when temperatures drop below 3° C

MINI WEATHER STATION

Sensor: **Wind, Rain, Freeze**

FEATURES

- Compact sensor that monitors wind, rain, freezing temperatures, and shuts the irrigation system off as weather conditions require
- Installs easily on any automatic irrigation system
- Set wind speed shutdown from 19 to 56 km/hr
- Set rain shutdown from 3 mm to 25 mm of rainfall
- Automatically shuts off system when temperatures fall below 3° C
- Warranty period: 5 years

SPECIFICATIONS

- Electrical rating: 24 VAC, 5 A maximum
- Wind vane diameter: 13 cm
- Wind speed adjustments: Actuation speed: 19 to 56 km/hr
- Reset speed: 13 to 39 km/hr
- Mounts: Slip fits over 55 mm PVC pipe or attaches to 1 cm conduit with adapter (supplied with unit)



MWS-FR
Height: 20 cm
Wind Vane Diameter: 13 cm

MINI WEATHER STATION

Model	Description
MWS	Weather station combines wind and rain
MWS-FR	Weather station combines wind and rain sensors with a freeze sensor

WIND-CLIK®

Sensor: **Wind**

FEATURES

- Adjusts to activate and reset at various wind speeds
- Wiring: normally-closed or normally-open
- Works with fountain systems to eliminate overspray in windy conditions
- Wind sensor interrupts/returns irrigation when programmed wind speed is measured
- Warranty period: 5 years

SPECIFICATIONS

- Switch rating: 24 VAC, 5 A maximum
- Wind speed adjustment
- Actuation speed: 19 to 56 km/hr
- Reset speed: 13 to 39 km/hr
- Mounts: Slip fits over 50 mm PVC pipe or attaches to 1 cm conduit with adapter (supplied with unit)



WIND-CLIK
Height: 10 cm
Wind Vane Diameter: 13 cm

FLOW-CLIK®

Sensor: **Flow**

FEATURES

- Automatically shuts down system if an overflow condition occurs
- Helps protect from flooding damage and erosion
- Calibration for precise system control: Single button allows each system to be programmed at a specified flow level
- Works with most Hunter and most non-Hunter controllers
- Multi-colour LED provides system status to display when power is applied and indicates if flow is within limits
- Compatible with most commercial and residential piping systems: Large flow range provides complete flexibility
- One button system calibration to set highest flow zone
- Warranty period: 5 years

SPECIFICATIONS

- Flow-Clik Interface Panel: 90 cm leads provided for easy wiring to controller (2 wires to controller, 24 VAC terminals and 2 wires to sensor and terminals)
- Current draw: 24 VAC, 0.025 A
- Switching current: 2 A maximum
- Max. distance between interface panel and sensor: 300 m
- Sensor Wiring: 2 x direct burial, 0.82 mm² or greater, colour-coded or marked for polarity, up to 300 m from controller
- Programmable start up delay: 0 to 300 seconds
- Programmable interrupt period: 2 to 60 minutes



Flow-Clik sensor and module shown with receptacle tees

FLOW-CLIK®	
Model	Description
FLOW-CLIK*	Standard kit for all 24 VAC controllers. Includes sensor and interface module, sensor requires FCT for pipe installation.

REQUIRED USER INSTALLED OPTION (SPECIFY SEPARATELY)	
Model	Description
FCT-100	1" (25 mm) Schedule 40 sensor receptacle tee
FCT-150	1½" (40 mm) Schedule 40 sensor receptacle tee
FCT-158	1½" (40 mm) Schedule 80 sensor receptacle tee
FCT-200	2" (50 mm) Schedule 40 sensor receptacle tee
FCT-208	2" (50 mm) Schedule 80 sensor receptacle tee
FCT-300	3" (80 mm) Schedule 40 sensor receptacle tee
FCT-308	3" (80 mm) Schedule 80 sensor receptacle tee
FCT-400	4" (100 mm) Schedule 40 sensor receptacle tee

Notes:

* FCT for pipe installation sold separately

BSP ADAPTERS FOR FCT FITTINGS	
Diameter	Model
1" (25 mm)	795700
1½" (40 mm)	795800
2" (50 mm)	241400
3" (80 mm)	477800

Pipe Diameter	FLOW RANGE			
	Operating Range			
	Minimum		Suggested Maximum*	
	l/min	m ³ /hr	l/min	m ³ /hr
1" (25 mm)	7.6	0.45	64	3.84
1½" (40 mm)	19	1.14	132	8.0
2" (50 mm)	37.8	2.26	208	12.5
3" (80 mm)	106	6.36	450	27.0
4" (100 mm)	129	7.74	750	45.0

Notes:

* Good design practice dictates the maximum flow not to exceed 1.5 m/sec. Suggested maximum flow is based upon Class 200 IPS plastic pipe.

SENSORS

FLOW-SYNC®

Sensor: **Flow**

FEATURES

- Simple two-wire connection to ACC and I-Core® controllers (up to 300 m)
- Feeds flow data (gallons or liters) to controller, for flow recording and monitoring purposes
- Robust waterproof construction
- Provides station level flow monitoring for reaction to high or low flow conditions
- Helps prevent damage and waste from leaks and breaks in piping system

SPECIFICATIONS

- Recommended pressure range: 1.5 to 15.0 bar; 150 to 1500 kPa
- Pressure Loss: < 0.009 bar; 0.9 kPa
- Wiring: 2 x direct burial, 0.82 mm² or greater, colour-coded or marked for polarity, up to 300 m from controller.



Impeller-type flow meter, requires FCT for pipe installation (sold separately)

FLOW-SYNC

Model	Description
HFS*	Hunter Flow-Sync sensor, use with ACC and I-Core controllers, sensor requires FCT for pipe installation

REQUIRED USER INSTALLED OPTION (SPECIFY SEPARATELY)

Model	Description
FCT-100	1" (25 mm) Schedule 40 sensor receptacle tee
FCT-150	1½" (40 mm) Schedule 40 sensor receptacle tee
FCT-158	1½" (40 mm) Schedule 80 sensor receptacle tee
FCT-200	2" (50 mm) Schedule 40 sensor receptacle tee
FCT-208	2" (50 mm) Schedule 80 sensor receptacle tee
FCT-300	3" (80 mm) Schedule 40 sensor receptacle tee
FCT-308	3" (80 mm) Schedule 80 sensor receptacle tee
FCT-400	4" (100 mm) Schedule 40 sensor receptacle tee

Note:
* Flow-Sync (sensor only) for use with ACC and I-Core controllers. Requires FCT for pipe installation (sold separately).

BSP ADAPTERS FOR FCT FITTINGS

Diameter	Model
1" (25 mm)	795700
1½" (40 mm)	795800
2" (50 mm)	241400
3" (80 mm)	477800

FLOW RANGE

Pipe Diameter	Operating Range			
	Minimum		Suggested Maximum*	
	l/min	m ³ /hr	l/min	m ³ /hr
1" (25 mm)	7.6	0.45	64	3.84
1½" (40 mm)	19	1.14	132	8.0
2" (50 mm)	37.8	2.26	208	12.5
3" (80 mm)	106	6.36	450	27.0
4" (100 mm)	129	7.74	750	45.0

Notes:
* Good design practice dictates the maximum flow not to exceed 1.5 m/sec. Suggested maximum flow is based upon Class 200 IPS plastic pipe.



Solar Sync[®]
Above



Soil-Clik[®]
Below

SENSORS

BUILT TO RESPOND

The Ultimate Environmental Solution

ABOVE & BELOW

Get the whole picture with the latest advances in water-saving technology. Pair our new Soil-Clik moisture sensor with Solar Sync to measure both soil and climate conditions. Soil-Clik won't allow watering on days that don't need it, or on wet turf; Solar Sync will use ET to adjust application amounts when irrigation is needed. Together they're the ultimate environmentally responsive solution.