IRROMETER®
SOIL WATER MANAGEMENT SINCE 1951

IRROMETER SOIL MOISTURE SENSORS

IRROMETER® measures soil water tension which indicates plant water availability. The STANDARD (SR) is for general use in most soils with ranges from 0-100 cb (kPa). The LOW TENSION (LT) is designed for use in very coarse soils and non-soil container media with ranges from 0-40 cb (kPa).

Both **SR and LT** gauges have a vent for better temperature and elevation related compensation, a large 2 ½ inch face for ease of reading, and a stainless steel rustproof body.
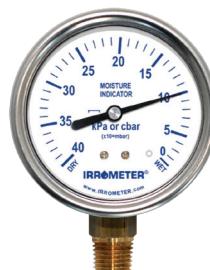
STANDARD

SR

LOW TENSION

LT
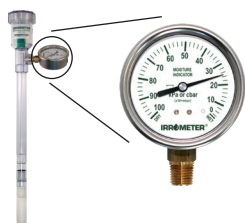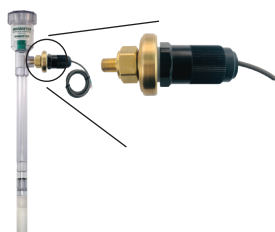
MLT

MINIATURE LOW TENSION IRROMETER® The compact size and membrane vented 0-40 cb (kPa) gauge make it the best choice for small container applications.

STANDARD GAUGE

DEPTH	CAT #	
6" (15 cm)	206	
12" (30 cm)	212	
18" (45 cm)	218	
24" (60 cm)	224	
36" (90 cm)	236	
48" (120 cm)	248	
LT DEPTH	**CAT #**	
6" (15 cm)	506	
12" (30 cm)	512	
18" (45 cm)	518	
24" (60 cm)	524	
MLT	**CAT #**	
MINI	MLT	

AUTOMATIC SWITCH

DEPTH	CATALOG #	
6" (15 cm)	206-AVS	
12" (30 cm)	212-AVS	
18" (45 cm)	218-AVS	
24" (60 cm)	224-AVS	
36" (90 cm)	236-AVS	
48" (120 cm)	248-AVS	
MLT	**CATALOG #**	
MINI	MLT-AVS	

SWITCH OUTPUT provides adjustable automatic vacuum switching capabilities. A PRO SERVICE KIT (#1002) is recommended for AVS models.
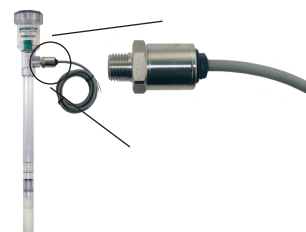
VOLTAGE OUTPUT
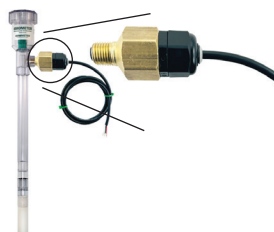
DEPTH	CATALOG #	
6" (15 cm)	206-RSU-V	
12" (30 cm)	212-RSU-V	
18" (45 cm)	218-RSU-V	
24" (60 cm)	224-RSU-V	
36" (90 cm)	236-RSU-V	
48" (120 cm)	248-RSU-V	
MLT	**CATALOG #**	
MINI	MLT-RSU-V	

RSU-V REMOTE SENSING UNITS provides soil moisture levels by converting the reading to a voltage signal. A PRO SERVICE KIT (#1002) is recommended for RSU models.

CURRENT OUTPUT

DEPTH	CATALOG #	
6" (15 cm)	206-RSU-C	
12" (30 cm)	212-RSU-C	
18" (45 cm)	218-RSU-C	
24" (60 cm)	224-RSU-C	
36" (90 cm)	236-RSU-C	
48" (120 cm)	248-RSU-C	
MLT	**CATALOG #**	
MINI	MLT-RSU-C	

RSU-C REMOTE SENSING UNITS provides soil moisture levels by converting the reading to a current signal. A PRO SERVICE KIT (#1002) is recommended for RSU models.

IMPORTANT NOTICE

At least one Service Kit should be purchased with any initial order to service all of your IRROMETER'S.
A new lost-cost Basic Service Kit is now available. (see page 2)

SERVICE KITS

A Service Kit is necessary for proper operation of an IRROMETER® and should be included on initial order.
One kit will service ALL of your instruments.

BASIC SERVICE KIT

Catalog #1000 ....
Includes: Syringe Pump, Irrometer Fluid, Chart Forms, Reference Book, and Canvas Bag (**MLT** compatible).

STANDARD SERVICE KIT

Catalog #1001 ....
Includes: Standard Pump, Irrometer Fluid, Chart Forms, Reference Book and Canvas Bag.

PRO SERVICE KIT

Catalog #1002 ....
Includes: Pump with Gauge, Irrometer Fluid, Chart Forms, Reference Book and Canvas Bag.

A **Service Kit** is used during initial installation and then periodically for removal of air from instrument to ensure maximum sensitivity and accuracy.
The **Pro Service Kit** serves the dual purpose of removing air and testing the gauge in one operation.
For Spanish instructions, add -SP to Catalog #

IRROMETER ACCESSORIES

CAT #	ITEM
1003	Test Pump Adapter................................
1004	IRROMETER Fluid *(0.7 oz. concentrate)*…
1004-L	IRROMETER Fluid *(6 oz. concentrate)*

IRROMETER® Vacuum Gauges

CAT #	ITEM
1008†	SR Gauge only *(0-100 cb[kPa])*...............
1008-LT†	LT Gauge only *(0-40 cb[kPa])* ....
1008-MLT†	MLT Gauge only *(0-40 cb[kPa])* ....

CAT #	ITEM
OUTPUT OPTIONS	
AVS	Auto Vacuum Switch............................ Adjustable centibar value
RSU-C†	Remote Sensing Unit........................ 4-20 mA Current Output - (1/4 NPT)
RSU-V	Remote Sensing Unit........................ Voltage Output - (1/4 NPT) with 10 ft cable

CAT #	ITEM
REPLACEMENT TIPS & COMPONENTS	
SRT	SR Replacement Tip ....
MLT-TIP	MLT Replacement Tip ....
CAP	IRROMETER Cap and Stopper Assembly ....
STOP	Stoppers...
SR-O	O-Ring (SR/LT) ....

SOIL SOLUTION ACCESS TUBES

SSAT – For easy extraction of soil solution samples when testing salinity levels or plant nutrients in soil water.
Includes vinyl suction line with rubber stopper seal and stopcock closure. Requires a vacuum source. (accessories below)

STANDARD TENSION

LENGTH	Single Line CAT #	Double Line CAT #
6" (15 cm)	A6C...........	A6C-DBL ......
12" (30 cm)	A12C........	A12C-DBL ....
18" (45 cm)	A18C.........	A18C-DBL ....
24" (60 cm)	A24C.........	A24C-DBL ....
36" (90 cm)	A36C.........	A36C-DBL ....
48" (120 cm)		A48C-DBL ....

LOW TENSION

LENGTH	Single Line CAT #	Double Line CAT #
6" (15 cm)	A6C-LT	A6C-LT-DBL......
12" (30 cm)	A12C-LT	A12C-LT-DBL....
18" (45 cm)	A18C-LT	A18C-LT-DBL....
24" (60 cm)	A24C-LT	A24C-LT-DBL....
36" (90 cm)	A36C-LT	A36C-LT-DBL....
48" (120 cm)		A48C-LT-DBL ....

SOIL SOLUTION ACCESS TUBES ACCESSORIES

CAT #	ITEM
SLA	Suction Line Assembly (to 24")........ ***For longer length, Add per ft (30cm)***
SLT	Bulk Vinyl Suction Line Tubing ...
SGL-STOP	Single Hole Stopper............... **per doz.**
DBL-STOP	Double Hole Stopper .... **per doz.**

1002-SSAT Vacuum Pump– Stopcock valve connection. Pump is required to create a sufficient vacuum.
SSAT Vacuum Pump ....

Cat #1002-SSAT

DS-50CC Extraction Syringe is used to extract soil solution from SSAT Tube and can be used to create a partial vacuum on shorter tubes [12" (30 cm) or less]. Extraction Syringe . . . .

DC-50CC†

WATERMARK SOIL MOISTURE SENSOR

CAT #	CABLE LENGTH	
200SS-5	5' (1.5 m)	....
200SS-5-S	5' (1.5 m)	....
200SS-15	15' (4.5 m)	....
200SS-15-S	15' (4.5 m)	....

For lengths longer than 15'—Add per foot.
(minimum applies)

200SS-VA	Voltage Adapter	....
200SS-SDI	3 Sensor SDI Adapter	....
VTC	Vinyl Caps for pipe assembly (bag of 100)	....

The **WATERMARK Soil Moisture Sensor** is an affordable and no maintenance alternative to tensiometers that can be used with any crop type and most soils. It can be read by compatible devices manufactured by IRROMETER and many others. Adapters to output sensor readings in 0-3v or SDI-12 are available. Reads in a 0-200 centibar (cb)/(kPa) range.

WATERMARK METER

Handheld meter for reading 200SS WATERMARK sensors. Adjustable for soil temperature variations. Touchpad operating panel with LCD display. Includes durable case, 9 volt battery and replaceable cable assembly.

CAT #	DESCRIPTION	
30-KTCD-NL	WATERMARK Meter	....
30-KTCD-NL-SP	WATERMARK Meter w / Spanish label and instructions	....
30-KTCD-Cable†	Replacement Cable	....

WATERMARK MONITOR

The **900M Monitor** is a battery operated data logger that automatically reads up to eight sensors. Users can view readings on the screen or download data to a laptop. The 900M Monitor accepts WATERMARK soil moisture sensors, soil and air temperature sensors, switch closure sensors, rain gauge, and IRROMETER RSU-V.

900M ACCESSORIES

CAT #	DESCRIPTION	
900M-RSU-V	RSU Voltage Wiring Board (One per 8 RSUs)	....
200TS	Soil Temperature Sensor with 15' (4.5 m) wire lead	....
ATS	Air Temperature Station with 36 in. (91 cm) wire lead	....
PPS-5	Preset Pressure Switch - 5psi	....
900RG	Rain Gauge	....

900M MONITOR PACKAGES:

CAT #	DESCRIPTION
900M	WATERMARK Monitor.............................. with seven WATERMARK Sensors, one Soli Temperature Sensor, each with 15' (4.5 m) wire leads.
900M-8	WATERMARK Monitor............................. with eight WATERMARK Sensors, each with 15' (4.5 m) wire leads.
900M-1-6-PPS	WATERMARK Monitor............................. with six WATERMARK Sensors, one Soil Temperature Sensor, each with 15' (4.5 m) wire leads and one Pressure Switch (for recording irrigation events).
900M-O	Monitor Only (without sensors)................

ATS –
Air Temperature Station includes sensor, radiation shield, and mounting bracket.

Rain Gauge –
AeroCone® design with mounting base and bird spikes.

IRROCLOUD SYSTEM

IC-10 MONITOR FEATURES

LTE-M Cellular Direct to Cloud: No other device needed

2+Years Battery Life: Standard "C" Batteries

Simple Set-Up: No configuration or calibration

Install Anywhere: No height or solar requirement

Frost Alerts: Sent via text message

DATA PLATFORM FEATURES

View or Download: Sensor data in real-time from any mobile device or computer. API integration available.

Quick View Dashboard: Provides device and sensor status, location map, and adjustable threshold gauge panel.

Graphing Suite: For detailed analysis of soil moisture, irrigation events, rainfall, soil/air temperatures, and device diagnostic data.

IC-10 SENSOR OPTIONS

- WATERMARK Sensors
- IRROMETER RSU-V
- Soil Temperature Sensor
- Pressure Switch
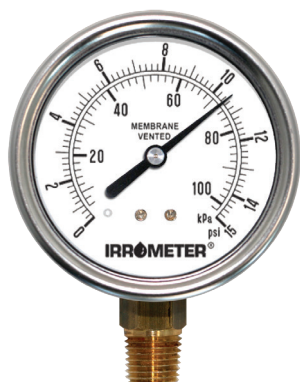- Air Temperature Station
- Rain Gauge
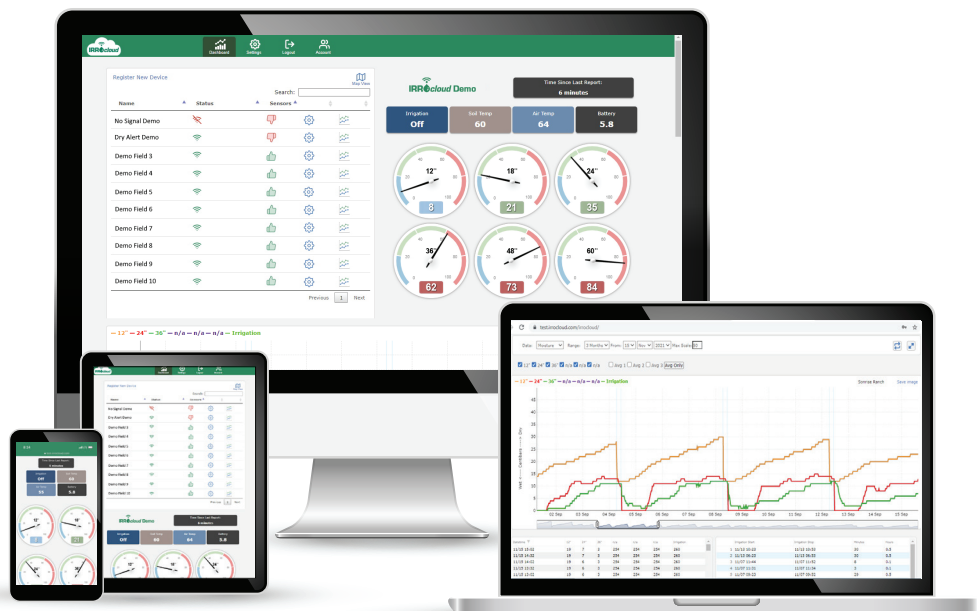
IC-10 MONITOR

CAT #	ITEM
IC-10	IRROcloud Sensor Monitor (without sensors) reads WATERMARKS. Includes 1 free year of IRROcloud service....
IC-10-IR	IRROcloud Sensor Monitor (without sensors) reads RSU-V IRROMETERS. Includes 1 free year of IRROcloud service......
IC-10-BASIC	IRROcloud Sensor Monitor Includes 3 Watermarks, 1 Soil Temp, 1 Pressure Switch and 1 free year of IRROcloud service ....
IC-10-PRO	IRROcloud Sensor Monitor Includes 6 Watermarks, 1 Soil Temp, 1 Pressure Switch and 1 free year of IRROcloud service ....

IC-10 SENSOR OPTIONS

| CAT #	ITEM
200TS	Soil Temperate Sensor ....
ATS	Air Temperature Station *(pictured page 3)* ....
PPS-5	Preset Pressure Switch ....
900RG	Rain Gauge - AeroCone® Design with mounting base and bird spikes *(pictured page 3)* ....
ISR	IRROcloud Service Annual Online Renewal ....

4

PRESSURE GAUGES

Membrane Vented Pressure Gauge –
(7MV series) Membrane vented pressure gauge allows for superior temperature and elevation related compensation while maintaining a dust proof and waterproof environment This item has a 1.6% accuracy rating across the full scale of the gauge. Features a stainless steel case, with a durable 2½ in. (63mm) polycarbonate face. Connected with a ¼ in. brass standard pipe thread stem (NPT) and integral snubber. Dual scale P.S.I. and kPa faceplate.

GAUGE RANGE	MEMBRANE VENT	
psi/kPa	CAT#	
15 psi / 100 kPa	7MV-15†	
30 psi / 200 kPa	7MV-30†	
60 psi / 400 kPa	7MV-60†	
100 psi / 700 kPa	7MV-100†	
200 psi / 1400 kPa	7MV-200†	
400 psi / 2800 kPa	7MV-400†	
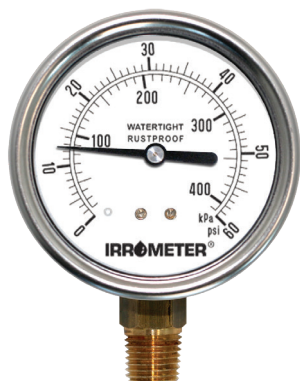
Liquid Filled Pressure Gauge –
(7LF series) Glycerin filled for severe service conditions with pulsation and vibration. Features stainless steel case with a durable 2½ in. (63mm) polycarbonate face. Connected with a ¼ in. brass standard pipe thread stem (NPT) and integral snubber. Dual scale P.S.I. and kPa faceplate.

GAUGE RANGE	LIQUID FILLED	
psi/kPa	CAT#	
15 psi / 100 kPa	N/A	
30 psi / 200 kPa	N/A	
60 psi / 400 kPa	7LF-60†	
100 psi / 700 kPa	7LF-100†	
200 psi / 1400 kPa	7LF-200†	
400 psi / 2800 kPa	7LF-400†	

LANDSCAPE AUTOMATION

The WATERSWITCH manages irrigation based on soil moisture status by overriding the irrigation controller operation when the soil becomes wetter than the moisture setting. The WATERSWITCH includes a weather resistant control module and one Watermark #200SS-5 sensor. Both AC and DC options available.

WaterSense
Meets EPA Criteria
Certified by
IAPMO R&T

- Nine selectable moisture level settings
- Reads sensor and changes switch accordingly
- Status indicator light
- Timed bypass

WATERSWITCH SELECTION CHART

CAT#	DESCRIPTION	VALVE CONTROL		SENSOR CIRCUIT
		COMMON INTERRUPT		
		Single	Groups	ALL
WS-AC	Powered by 24 VAC from your controller	✓	✓	✓
WS-DC	Powered by its own internal 9 volt battery			✓
WS-AC-T	WS-AC with timer	✓	✓	✓

INSTALLATION TOOLS

Coring Tool Kit – Nickel plated 7/8" (22 mm) soil coring tool. Comes as a kit in fabric storage pouch with two 12" (30 cm) extensions and handle for making up to a 36" (90 cm) access hole. Can also be used for soil sampling.
Cat #1013...

Auger Tool Kit – Nickel plated 1" (25 mm) soil auger. Makes oversize hole for grout style sensor installation in hard or rocky soils. Comes as a kit in fabric storage pouch with two 12" (30 cm) extensions and handle for making up to a 36" (90 cm) access hole.
Cat #1014...

Extension Rod – 12" (30 cm) extension rod for #1013 or #1014 to make deeper access holes.
Cat #1015..............................

WATERMARK Sensor Insertion Tool
Tee handle style tool for inserting a WATERMARK Sensor up to 30" (76 cm) into a borehole created by one of the other tools shown in this section. It has an internal ejection rod inside the tube to push the sensor off of the tool once it's fully inserted into borehole.

Cat #1017..

Slide Hammer – Steel slide hammer with 7/8" (22 mm) diameter x 48" (120 cm) long insertion tip, calibrated every 12" (30 cm). Top of tool is sliding hammer that drives tip into and back out of the ground, leaving a smooth borehole for sensor insertion. Cat #1012......................................

WEIGHT AND MEASUREMENT INFORMATION

NET WEIGHTS

LENGTHS	6 INCH (15 CM)	12 INCH (30 CM)	18 INCH (45 CM)	24 INCH (60 CM)	36 INCH (90 CM)	48 INCH (120 CM)	60 INCH (150 CM)
IRROMETER	.844 lb. /.383 kg	.968 lb. / .439 kg	1.09 lb. / .496 kg	1.22 lb. / .553 kg	1.47 lb. / .666 kg	1.72 lb. / .780 kg	1.97 lb. / .893 kg
SSAT	.176 lb / .080 kg	.254 lb. / .115 kg	.331 lb. / .150 kg	.408 lb. / .185 kg	.562 lb. / .255 kg	.717 lb. / .325 kg	.871 lb. / .395 kg

CAT #	DESCRIPTION	WEIGHT
200SS	WATERMARK Sensor 5' (1.5 m)	.157 lb. / .071 kg
30-KTCD-NL	WATERMARK Meter	.752 lb. / .341 kg
WS-AC and WS-DC	WATERSWITCH	.7 lb. / .31 kg
900M	WATERMARK Monitor	5.00 lb. / 2.27 kg
7 Series	Gauge	.375 lb. / .170 kg
IC-10	IRROcloud Sensor Monitor	2.00 lb / 1.00 kg
1001	Service Unit	1.07 lb. / .484 kg

CAT #	DESCRIPTION	WEIGHT
1002	Test Pump Service Unit	1.44 lb. / .654 kg
1004	IRROMETER Fluid	.187 lb. / .085 kg
1005	Monthly Chart (100)	.28 lb. / .128 kg
1012	Slide Hammer	33.00 lb. / 14.97 kg
1013	Coring Tool Kit	3.00 lb. / 1.36 kg
1014	Auger Tool Kit	3.00 lb. / 1.36 kg
1017	WATERMARK Insertion Tool	3.00 lb. / 1.36 kg

PRICES EFFECTIVE JANUARY 1, 2025 – ALL PRODUCTS ARE MADE IN THE U.S.A., EXCEPT WHERE † INDICATED.

All prices F.O.B. Riverside, California, and apply to North America. (U.S. Dollars)
Terms: Cash, VISA, MasterCard with order or C.O.D.
Net 30 days with previously established credit. Minimum $7.50 order charge

Prices and specifications subject to change without notice.
EXPORT PACKING CHARGE: $0.50 per IRROMETER – $5.00 minimum per package.
(Applies only to shipments outside North America.)

Shipping and Mailing Address:
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Riverside, California 92507-1600
Phone: **(951) 682-9505** Fax: **(951) 682-9501**
Email: **sales@irrometer.com**
U.S.A. (10/24) #9