

Well Cap Groundwater Monitoring Station



Overview

Sutron's Groundwater Well Cap leverages the power and reliability of the X-Link logger family to deliver a cost-effective, self-contained package to monitor groundwater.

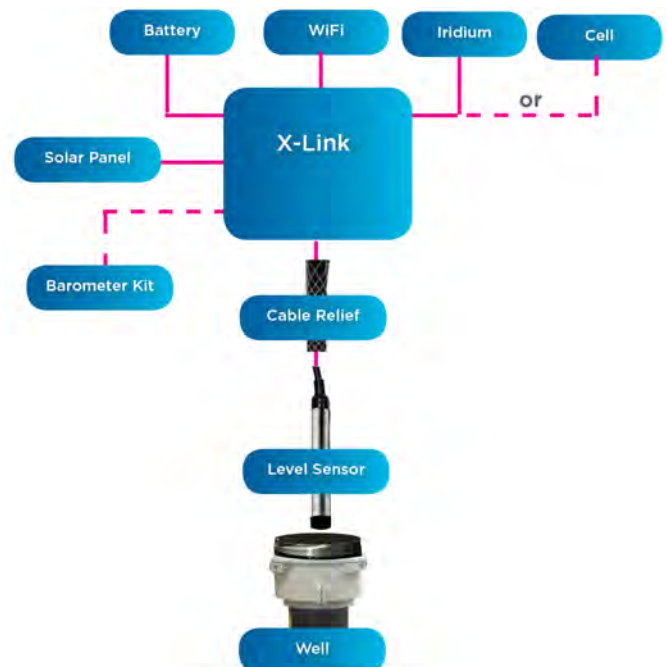
Features

Sutron's Well Cap Groundwater Monitoring Station makes it easy to automate measurement of groundwater wells. The cap has the following features:

- ▶ Tamper-proof packaging
- ▶ Capable of measuring sensors over SDI-12, 4-20ma, and RS485
- ▶ Low power with integrated 7 Ahr battery for long term reliable operation
- ▶ Optional cell modem and dataplans
- ▶ Optional Iridium modem and dataplans
- ▶ Optional solar panels to reduce battery servicing intervals
- ▶ Mounts on NPS 2 (2.375", 60.33mm OD), 3 (3.5", 88.9mm OD) or 4 (4.5", 114.3mm OD) pipe
- ▶ ¼ hasp for customer provided lock
- ▶ Built-in Sutron X-Link logger/transmitter
- ▶ IP67 housing for battery/electronics/antenna with screwless access.
- ▶ Powder coated cast aluminum construction with ABS plastic dome.
- ▶ Hinged design provides access to sensors without opening electronics compartment
- ▶ Sensor hanger plate with room to insert electronic tapes or other calibration devices.
- ▶ Concealed bolts to fasten the cap to the well casing.
- ▶ Compatible with a variety of sensors with SDI-12 or analog output.
- ▶ Optional solar panel for continuous operation
- ▶ **DIMENSIONS**
Diameter: 8" max (20.32cm)
Height: 12" (30.48cm)
Weight: : 6.7 lb including battery & logger (3.04kg)



Application: Groundwater Monitoring



Specifications Highlights <i>See associated XLink Datasheets for Detailed Specifications & Ordering Options</i>	
Measurement interval	1 to 24 hours
Measurements	16 supported
Analog Input	2 single-ended 2 differential 1 4-20 mA
Range	0-5 V
Resolution	.298 μ v
Accuracy @25°C	0.004% max
SDI-12	V1.3 compliant
Input voltage	8-16VDC (10V minimum for SDI-12 sensor support)
Current Consumption	0.5mA standby typical (all sensors unpowered)
Temperature	-40°C to +60°C
Humidity	0-95% non-condensing
Log Capacity	240,000 readings, flash memory
Dimensions	Dia: 8" max (20.32cm) Height: 12" (30.48cm)
Weight	6.7 lb including battery & logger (3.04kg)

ORDERING DATA PLANS (GPRS & HSPA)

T-MOBILE GPRS SERVICE PLANS (DOMESTIC)

TGPRS.ACT	Activation 1 time charge
TGPRS.1MB.PLAN	Monthly Plan, 1 MB
TGPRS.1MB.ADD	Overage charge / MB
TGPRS.5MB.PLAN	Monthly Plan, 5 MB
TGPRS.1GB.PLAN	Monthly Plan, 1 GB
TGPRS.100SMS.PLAN	Monthly Plan

ORDERING DATA PLANS (CDMA)

VERIZON CDMA SERVICE PLANS (DOMESTIC)

VCDMA.ACT	Activation 1 time charge
VCDMA. 1MB.PLAN	Monthly Plan, 1 MB
VCDMA.20MB.PLAN	Monthly Plan, 20 MB
VCDMA. 1MB.ADDL	Overcharges / MB
VCDMA.SMS	SMS Each Message



ORDERING GUIDE

SELECT ONE OF THESE FULLY-ASSEMBLED WELL CAP PACKAGES

Fully-assembled Well Cap Package that includes basic datalogger w/cell modem plus your choice of battery/solar panel configuration. Choose the model with your preferred cell or Iridium communications.





Part #	Description
WC-GPRS-1	26 Ah Lithium Battery* Non-rechargeable
WC-GPRS-2	7 Ah Lead Acid w/ 2 watt Solar Panel
WC-CDMA-1	26 Ah Lithium Battery* Non-rechargeable
WC-CDMA-2	7 Ah Lead Acid w/ 2 watt Solar Panel
WC-HSPA-1	26 Ah Lithium Battery* Non-rechargeable
WC-HSPA-2	7 Ah Lead Acid w/ 2 watt Solar Panel

Fully-assembled Well Cap Package that includes basic datalogger w/Iridium modem plus your choice of battery/solar panel configuration.

WC-IRIDIUM-1	26Ah Lithium Battery* Non-rechargeable
WC-IRIDIUM-2	7 Ah Lead Acid w/ 2 watt Solar Panel
WC-XLINK-1	26 Ah Lithium Battery* Non-rechargeable
WC-XLINK-2	7 Ah Lead Acid w/ 2 watt Solar Panel

**Assuming the modem is turned off between transmissions, the high capacity, non-rechargeable, low self-discharge Lithium Battery should last over 1 year, (Calculations did not take into consideration any power drain from the sensor.)*

OPTIONAL ORDERING

56-114 series	Sutron Submersible Level Sensors (Other brand name sensors may also be used.) Vented sensors require desiccant. A 1" diameter tube plus desiccant should fit standard well pipes. At this time, Sutron does not provide this desiccant assembly. Please consult with your regional Sutron representative when placing your orders." 
2271-1195-1	Cable Strain Relief Kit 

ORDERING DATA PLANS (IRIDIUM & WYLESS GPRS)

IRIDIUM ACTIVATION & SERVICE PLANS

ISBD.SACT	Station Activation
ISBD.OK.1	Min. Monthly Fee, no Data Plan
ISBD.12K.1M.PLAN	Min. Monthly Fee, 12 KB Data
ISBD.100K.1M.PLAN	Min. Monthly Fee, 100 KB data

WYLESS GPRS FOR DOMESTIC USE (covers T-MOBILE, AT&T, roaming partners)

WGPRS.ACT	Activation, 1 time charge
WGPRS.1MB.PLAN	Monthly Plan, 1 MB
WGPRS.1MB.ADDL	Overage charge / MB

SMS is not available with WYLESS GPRS.

