

Total Precipitation Gauge & Logger TPG-0001-1 & TPG-0003-1

Description

Sutron's Total Precipitation Gauge (TPG) is a weighing bucket gauge with a built-in logger designed for unattended measurement of precipitation in remote locations throughout the world.

The gauge has a large collection orifice to reduce the chance of blockage. A large collection container holds the precipitation on a precision weighing platform with accuracy <0.02" (0.6mm) and resolution (<0.001", 0.025mm) needed for the most demanding monitoring systems.

Several models of the TPG are available. The standard version has a single load cell. The enhanced version has three load cells – for added redundancy and reliability. With the three load cells, the system can continue to operate reliably if one of the sensors should fail.

Sutron designed the TPG using the technology proven in the NWS Fischer Porter Rebuild kit program. Many users will find it easier to replace their aging Fischer Porter Gauge with the TPG than it is to refurbish/repair/rebuild the gauge.



Inside the TPG

Features & Specifications

CAPACITY	36" inches (914mm) precipitation standard.
RESOLUTION	< 0.001" (0.025mm)
ACCURACY	0.02" (0.6mm) (-25°C to +60°C) 0.05" (1.27mm) (-50°C to +60°C)
OPERATING TEMPERATURE *	-50°C to +60°C.
DIMENSIONS	18" diameter, 28" high
WEIGHT	42.0 lbs.
BASE	Cast aluminum base with compatible with 4.0" pipe (4.5" or 0.114 OD). Includes bubble level. (Order mounting pipe separately.)
HOUSING	UV Resistant ABS plastic with 8" diameter aluminum knife edge opening (~50 in2, 324 cm2)
COLLECTION PAIL	Plastic with handles & depression in center for calibration weights
LOAD CELLS	Precision, hermetically sealed load cells
	TPG-0001-1 uses 1 load cell
	TPG-0003-1 uses 3 load cells for redundancy
RTC	RTC accurate to ±20 seconds /month
INTERFACES	SDI-12 V1.3, RS232
TEMPERATURE	Internal temperature: accurate within 1 degree C.
MEASUREMENTS	Intensity, accumulated precipitation, temperature
CALIBRATION	Built-in calibration function using customer supplied weights for annual certification.
POWER	Power 9-18VDC, reverse protected, <1ma standby, <5ma active.

Ordering

- TPG-0001-1 TPG, single cell*
- TPG-0003-1 TPG, triple cell

OPTIONS

- TPG-DK TPG Drain Kit
- TPG-HK-120 TPG Heater kit, 120V, 200W
- TPG-HK-240 TPG Heater kit, 240V, 200W
- TPG-HK-48 TPG Heater kit, 48V, 200W

*Extended temperature range available



SUTRON CORPORATION

22400 Davis Drive
GS-25F604D SBSA

Sterling, VA 20164

(703) 406-2800
ISO Certified

(703) 406-2801 Fax

www.sutron.com
3/8/2013

sales@sutron.com

page 1