

UPG1000 UNIVERSAL PRECIPITATION GAUGE

For the measurement of rain, snow, sleet, drizzle and hail



Standard rain gauge (left), UPG1000 universal precipitation gauge (right)

- **Unique aerodynamic shape for measurement accuracy.**
- **Eliminates the need for expensive wind shields in all but very extreme locations.**
- **Measures liquid, mixed and solid precipitation (rain, snow, drizzle, sleet, hail).**
- **Low voltage electric funnel heating for snowfall measurement – no need for weighing load cells, antifreeze or periodic siphoning.**



Based on our well-established SBS series aerodynamic tipping bucket rain gauge, the UPG1000 Universal Precipitation Gauge utilises heating elements to provide a truly universal, general purpose, precipitation gauge that works across the full spectrum of precipitation. The deep aerodynamically-shaped funnel keeps out splash to an absolute minimum facilitating not only the measurement of drizzle at high latitudes and heavy convective rainfall at the tropics but also snow and hail.

The gauge uses two silicone heating mats and four thermocouples to keep the funnel temperature between 1-4 Deg C. These mats are powered by 24VDC at 12.5A (300W). The inside of the gauge is heated by separate heaters and thermocouples which are controlled independently from the funnel. The heaters are powered by 24VDC at 1.1A (26.4W). The internal temperature is held at 1-4 Deg C.

Standard rain gauges fitted with heating systems often suffer from internal overheating which can cause evaporation problems. The UPG1000 eliminates the possibility of overheating and evaporation because the funnel and funnel heating are separate from the bucket area, funnel and bucket being controlled independently.

We are able to supply a power supply unit that can be sited up to 50 metres from the gauge. This unit can be installed in a building with a low voltage (24VDC) cable run to the gauge. This makes the system safe for the user and other people.



Standard raingauge (right), UPG1000 universal precipitation gauge (left)

Gauge designed and developed in conjunction with TerraData, Wallingford, U.K. and manufactured under licence. Registered Design Number 3009691.