

6529-3

AUTOMATIC EVAPORATION MONITORING SYSTEM



Unidata 6529-3 automatic evaporation monitoring system measures how much water evaporates from a Class A evaporation pan by measuring the water level in an adjoining stilling well. Use of stilling well reduces fluctuations in the pan's water level caused by wind.

The 6529-3 operates an evaporation pan and records evaporation and rainfall data. The instrument is normally supplied as a complete package with a US Class A evaporation pan and all installation fittings, but it can be connected to any other type of pan.

The 6529-3 system is designed to operate for long periods without maintenance. The water level instrument and data logger operate for one year from internal batteries and water level control system, refill and discharge of water from the evaporation pan, is solar powered. The water supply to refill the evaporation pan is provided by the user from a tank or a reticulated water supply pipe. Rainfall removed from the pan can be recycled if required.

The datalogger included with the unit is fully programmable and has all the STARLOG features. Some of these are: event and time interval recording,

programmable measurement and recording intervals, signal processing such as average, max, min and computations including flow conversions and rating tables.

A water temperature sensor and a range of weather sensors can be added to the system to identify the relationship between pan evaporation and site conditions. These are required for evaporation and evapo-transpiration studies and modelling.

The traditional micrologger can be replaced with the Unidata Neon Remote Terminal that can use either cellular or satellite communication links to transmit the logged data to a central Neon server and the data can be then viewed on a standard web browser.in near real time.

SPECIFICATIONS

PHYSICAL SPECIFICATIONS	
MATERIAL ENCLOSURE:	Powder coated aluminium
SIZE:	320mm x 300mm x 750mm (LxWxH)
MATERIAL PAN:	Stainless Steel
SIZE:	ID 1207mm, OD 1290mm, Depth 250mm US Class A compatible
MATERIAL BIRD GUARD:	Stainless steel mesh
SIZE:	Diameter 1215mm x 210mm deep
MATERIAL PAN MOUNTING:	ISPM Treated Pine (IPPC 81gn)
SIZE:	1300mm x 1300mm x 105mm (LxWxH)
WEIGHT:	~52kg net

OPERATING TEMPERATURE:	-20°C to 60°C
RANGE:	30mm to 250mm. Pan empty to full
RESOLUTION:	0.1mm of evaporation or rainfall
ACCURACY:	± 0.1mm
SOLENOID:	0-1000kPa 12V
LEVEL RESET:	Programmable. Default reset to 200mm (± 1mm) at a preset time each day
WATER LEVEL:	6541 Water Level Instrument with 512k Micrologger
POWER SUPPLY:	0.3Ah/day
BATTERY:	Model 6907B 12V, 7Ah sealed lead acid
SOLAR PANEL:	Model 6904I-10 12V, 10W solar panel