

## Integrated Test Bench for Drip Irrigation Tape and Drip Irrigation Pipe

### KASON DG-M



#### PRODUCT FEATURES

Hardware: This set of equipment is entirely made of rust-proof materials, featuring corrosion resistance and a long service life. It extensively utilizes quick-assembly structures, making sample installation convenient and fast. The dripper and drip irrigation pipe (tape) hydraulic performance test bench uses a movable water collection and measurement unit, suitable for testing drip irrigation pipes and tapes with various spacings. (The standard drip irrigation system can adapt to testing drippers and drip irrigation pipes and tapes with various spacings between 100mm and 500mm.) Pressure control uses a high-precision pressure transmitter and a 10-bit fast PWM pulse width modulation mode, with a pressure control accuracy of less than  $\pm 1\text{kPa}$  and a pressure adjustment time of less than 1 minute. The flow rate testing unit utilizes a dedicated weighing sensor and module from an electronic balance, ensuring high accuracy and minimal temperature drift. Automatic calibration facilitates measurement and calibration. Incremental measurement with a precise timing chip ensures synchronized and accurate measurements. The control system employs a modular design based on a programmable logic controller (PLC), allowing for easy system upgrades and expansion. Control is handled by an industrial computer with integrated touchscreen operation for user-friendly operation. The control system can perform all testing operations, supports data export to USB flash drives and other mobile storage devices, and supports connection to any brand of printer (USB interface) without requiring a separate computer. Electrical components are isolated from water-contaminated areas, achieving water and electricity separation and ensuring a high safety factor.

#### MAIN TECHNICAL PARAMETERS

[ HYDRAULIC PERFORMANCE TEST BENCH FOR DRIP HEADS ]  
[ AND DRIP IRRIGATION PIPES (BELTS) ]

MODEL	KASON DG-M
Dimensions	2880*1290*1260
Voltage	220V @50HZ 5A
Test Stations	25 (Drip Heads or Drip Irrigation Units)
Test Methods	Closed-Circuit Method, Loop Method
Automatic Measurement Units	25 Points
Measurement Range	0 ~ 2L ( $\leq 2000\text{g}$ )
Measurement Accuracy	$\leq 0.5\%FS$
Resolution	0.1mL (g)
Applicable Drip Element Spacing	100mm-500mm (Expandable)Uses Guide Rail Sliding
Minimum Timing Unit	0.1s

[ CONSTANT TEMPERATURE ]  
[ WATER SUPPLY PRESSURIZATION SYSTEM ]

MODEL	KASON DG-M
Dimensions	1250*700*1000
Voltage	380V @50HZ 60A
Pressure Range	10kPa ~ 1000kPa
Resolution	0.1kPa
Pressure control accuracy	$\leq 1\%FS$
Constant temperature	Room temperature ~ 40°C
Constant temperature accuracy	$\pm 1^\circ\text{C}$
Heating power	3 kw
Refrigeration unit (optional item not included in the quotation)	1 kw

[ HIGH TEMPERATURE TEST CHAMBER ]

MODEL	KASON DG-M
Dimensions	3600*702*1020
Voltage	380V @50HZ 30A
Test stations	5
Constant temperature	Room temperature ~ 70°C
Constant temperature accuracy	$\pm 1^\circ\text{C}$
Heating power	9 kw