6549
WATER LEVEL SENSOR MODBUS

MODEL A

The 6549 MODBUS water level sensor is a pressure sensor-based instrument for measuring water depth in many applications. It has a cable with a vent tube for atmospheric pressure compensation. The 6549 water level sensor provides accurate long term measurements of water depths of 0m to 10m with an accuracy of 0.1% full scale. The sensor communicates via Modbus RTU RS485 protocol.

The 6549 water level sensor is fully sealed and temperature compensated. A hermetically sealed stainless steel 316 case with a protection type IP 68 allows the pressure sensor to be immersed down to a depth of 10m. The inner vented connection cable makes pressure compensation of the measuring cell against the atmosphere possible, thus hydrostatic pressure measurement. The submersible pressure sensor meets the electromagnetic compatibility (EMC) requirements of EN 61326.

The mechanical fastening of the pressure sensor does not require any additional strain relief, as the construction of the cable is suitable to take a maximum tensile force of 1000 N. The cable's individual signal wires are epoxy sealed into the casing to protect against water ingress. The probe comes with the inbuilt surge/lightning protection, which makes this probe ideal for monitoring drainage, bore depth and river height. It can also measure water with dissolved solids and other liquids.

SPECIFICATIONS

PHYSICAL SPECIFICATIONS	
MATERIAL:	Marine Grade 316 Stainless Steel
SIZE:	Diameter 27mm x 146mm long
WEIGHT:	~230g
INGRESS PROTECTION:	IP68
CABLE:	PUR Vented Cable
ELECTRICAL SPECIFICATIONS	
EXTERNAL POWER:	10-30VDC, 24V typically
DEPTH	
RANGE GAUGE:	10m of water
ACCURACY:	Typically ±0.1% FS

LONG TERM STABILITY:	Typically 0.1% FS / Year, Max 0.2% FS / Year
OUTPUT:	MODBUS RS485, 32bit IEEE floating point
OPERATING TEMPERATURE:	-40℃ to 80℃
COMPENSATING TEMPERATURE:	-10℃ to 70℃
TEMPERTURE DRIFT:	Typically 0.03% FS /℃, Max 0.05% /℃
POWER CONSUMPITION:	Current output: (U*0.02)W Voltage output: (U*0.008)W Digital output: (U*0.015)W
LIFE CYCLE:	1*10^8 @25℃