

6542

HYDROSTATIC WATER DEPTH AND TEMPERATURE PROBE SDI-12



MODEL D



The 6542 hydrostatic water depth and temperature probe 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 6542 Hydrostatic water depth and temperature probes provide accurate long term measurements of water depths of 3m to 50m in standard ranges, with an accuracy of 0.05% full scale. Sensor communicates via SDI-12 v1.3 or Modbus RTU RS485 protocol.

The 6542 is fully sealed and temperature compensated. A hermetically sealed case with a protection type IP 68 allows the pressure sensor to be immersed down to a depth of 200m. The inner vented connection cable makes pressure compensation of the measuring cell against the atmosphere possible and thus hydrostatic pressure measurement. The pressure sensor special for submersible measurement meets the electromagnetic compatibility (EMC)

requirements to 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. This probe is ideal for monitoring drainage, bore depth and river height. It can also be used to measure water with dissolved solids and other liquids.

SPECIFICATIONS

PHYSICAL SPECIFICATIONS	
MATERIAL:	Marine Grade 316 Stainless Steel or titanium
SIZE:	Diameter 19mm x 214mm long
WEIGHT:	400g
OPERATING TEMPERATURE:	-15°C to 55°C
ELECTRICAL SPECIFICATIONS	
EXTERNAL POWER:	9-16VDC
DEPTH	
RANGE GAUGE:	3.5m, 10.5m, 21m of water
ACCURACY:	±0.05% FS

RESOLUTION:	±0.0034% FS
MAX OPERATING PRESSURE:	1.1 x full scale
TEMPERATURE	
RANGE:	-15°C to 55°C
ACCURACY:	±0.5°C for 0° to 55°C and ±2.0°C for below 0°C
RESOLUTION:	±0.06°C
MODBUS:	RS485 RTU, output = 32bit IEEE floating point
SDI-12:	SDI-12V 1.3 recorder (1200 baud smart instrument channel)
CABLE:	Custom lengths of ether polyurethane, polyethylene or ETFE cable