GEOLOGICAL, GEOPHYSICAL, GEOTECHNICAL SERVICES AND INSTRUMENTS



Automatic Monitoring by Sensor and Data Logger Unit for Water Level Measurement

# S&DL Water Level Meter



### <Summary>

S&DL Water Level Sensor (Normal type) is designed to minimize effects of both temperature changes and external noises by putting a pressure sensor and a data logger into its probe section which is installed in the water. Its battery section and RS-232C are located in a borehole mouth when installed, so data correction from the sensor is very easy.

With an i-SENSOR data communication unit, it is possible for users to receive measurement data by E-mail.

Also, its probe section is so small that its outside dimension is only 25mm in diameter, allowing it to be used easily in a VP-40 borehole.

#### <Features>

- It achieves very high stability by locating its data logger section in the water which is less subject to temperature changes. In addition, it is little affected by external noises, due to its integrated designing of a pressure sensor and a data logger
- It is very easy to install this sensor in field. Its installation is completed just by fixing a battery box in a borehole mouth, and any special handling procedures or techniques are not required.
- It is possible to transmit measurement data to designated e-mail addresses through a mobile telephone network, if used with an i-SENSOR data communication unit.
- Its very low-power consumption design enables long-term observation even when used with three D size alkaline batteries.

## <Specification>

Measurement range	WL-10	: 0 ~ 10 m
	WL-20	: 0 ~ 20 m
	WL-35	: 0 ~ 35 m
Measurement accuracy		: ±0.1 %FS
Temperature character		: Less than 0.04 %FS / °C
A / D resolution		: 24 bit
Measurement interval		: 1min ~ 10days (Configurable on a minute time scale)
Memory size		: 512KB (approx. 57,000 data)
Interface		: RS-232C
Operating voltage range		: 3.2 ~ 9.0V (Exclusive of a voltage drop by cable)
Battery type		: Alkaline battery : Size D battery (1.5V) x 3
		: Lithium battery (Option)
		- Designated lithium battery $6V$ (A specially-manufactured adapter is required)
		- Designated lithium battery 9V (A specially-manufactured adapter is required)
Consumption current		: 10μA(typ.) (Standby:Sleep mode)
		: 50mA(typ.) (with CPU operating) ※ When used with 4.5V power source
Operating temperature	range	: Probe section $0 \sim 50^{\circ}$ C (Except in the case of freezing)
		: Battery section -30 $\sim$ 60°C (When used with designated lithium battery)
Probe outside dimension	on	: φ25×290mm



i-SENSOR Data Communication Unit





S&DL Water Level Sensor



Please note specifications are subject to change without notice for the improvement.

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