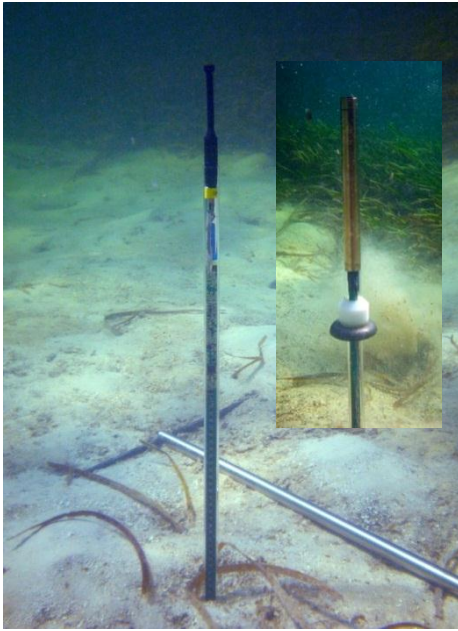
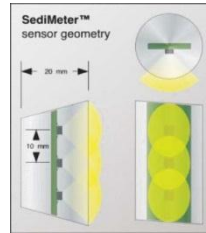
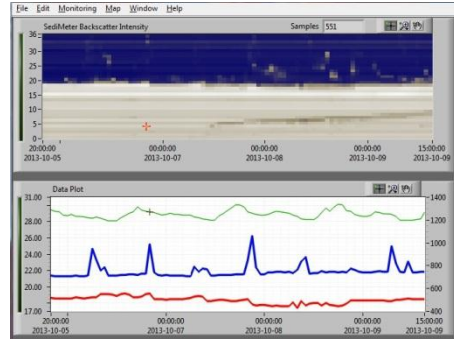


퇴적량 측정기 (Sediment Recorder)



Model : SM3



용 도(Applications)

- 하천, 호수, 해양의 퇴적 및 침식 작용 연구
- 하상의 퇴적 및 침식량 및 속도의 연속 측정
- 교량 세굴 현상의 연구
- 퇴적물 오염도 및 성상 연구 시 기초 조사
- 수로 관찰 및 준설, 매립 모니터링 등의 연구

특 징(Features)

- 36개의 적외선 센서로 0.1mm의 정밀 측정 가능
- 탁도(FBU단위) 및 온도 동시 측정
- 내장 배터리로 1년 이상 사용 가능
- 1초 ~ 24시간 저장주기 선택 가능
- 8,192개의 데이터 저장 가능

SPECIFICATIONS

Unique Specifications

	SM3A	SM3B
Cleaner	No	Yes
Length	ca 700 mm	ca 760 mm
Mass	ca 140 g	ca 380 g + ca 230 g shuttle*
Diameter	15 mm	15 mm sensor / 20 mm motor house 60 mm shuttle
Battery Size	AAA	AA
Battery Capacity	550 mAh	800 mAh
Connector	Top end, under-water pluggable	Bottom end

Common Specifications

Data

Data output	Turbidity at 36 + 1 levels (FBU), Bottom level (cm), Temperature (cK), Battery voltage (mV)
Turbidimeter principle	180° optical backscatter (OBS)
OBS wavelength	945 nm (NIR)

OBS detectors	36 for sediment level + 1 for turbidity and cleaner operation
OBS spacing	36 at 10 mm + one at 110 mm
Bottom level accuracy	±2 mm (for a well defined the bottom)
Bottom level resolution	0.1 mm
Thermometer location	Between OBS #36 and #37
Thermometer resolution	0.1°C, calibrated to ±0.5°C
Logger	
Measurement interval	User selectable from 1 second to 24 hours
Memory	8192 records
Communication	
Computer interface	RS-485 (a.k.a. RS485, TIA-485)
Baud rates	9600 baud; 115,200 baud (9600,N,8,1 after RESET)
Network	Up to 255 units in a daisy-chained cable
Protocol	LogDator Communication Protocol ver. 3.0
Power	
Input voltage range	$5\text{ V} \leq U_{\text{supply}} \leq 15\text{ V}$
Charge time	ca 8 to 10 hours
Current, charging	$I_{\text{max}} \approx 110\text{ mA}$
Current, on-line monitoring	$I_{\text{average}} \approx 10\text{ mA}$
Battery life	Over one year
Battery type	Lithium (NiMH on special order)
User interface	
Power status LED	Blue light when external power is connected
Battery charging LEDs	Red for charging, green for full, both for error
RS-485 LEDs	Yellow for listening, green for transmitting
Measurement indicator LED	One blink per measurement
Magnetic reed switches	Reset CPU; Battery charging error override
Environmental	
Depth rating	45 m (150') standard
Temperature	From 0°C to 50°C, not exposed to direct sunlight
Optical liquid medium	Purified saturated oil, odorless, combustible
RoHS (*SM3B)	Lead in shuttle counterweight is exempt from prohibition

CONFIGURATIONS

SM3A	SediMeter 3 w/o cleaner, permanently sealed	1 set
SM3A-kit	SediMeter 3 w/o cleaner with typical accessories	1 set
SM3B	SediMeter 3 with cleaner, permanently sealed	1 set
SM3B-kit	SediMeter 3 with cleaner and typical accessories	1 set