



ANALITE NEP495 TURBIDITY & TEMPERATURE LOGGING PROBE



The ANALITE NEP495 turbidity probes can monitor and log turbidity and temperature in a sturdy self-contained package that is easy to set up and easy to selectively download the data collected.

The ANALITE NEP495 microprocessor based turbidity probe is designed for monitoring and logging applications where turbidity levels of up to 1,000NTU may be encountered. Available ranges are 40NTU, 100NTU, 400NTU and 1,000NTU, which can be set by the user. The ANALITE NEP495 probe, with its integral wiper assembly, is designed to operate over an extended period of time where bio-fouling or sedimentation build-up is likely. The ANALITE NEP495 turbidity probes may be submerged to a depth rating of 100 meters (approx. 330 feet).

The ANALITE NEP495 probe use 90° optics and employs infrared light in accordance with ISO7027 and use a unique modulation technique that ensures almost total rejection of ambient light conditions. The salient features of the ANALITE NEP495 probes are tabled below:

Feature	NEP495
RS232 Interface	Yes
Integral and Auto Wiping	Yes
Turbidity Logging	Yes
Temperature Logging	Yes
User Range Select	Yes
User Calibrate	Yes
Firmware Upgradeable	Yes

The user may calibrate the probe at any time as well as allowing later versions of firmware to be uploaded by the user via the RS232 interface.

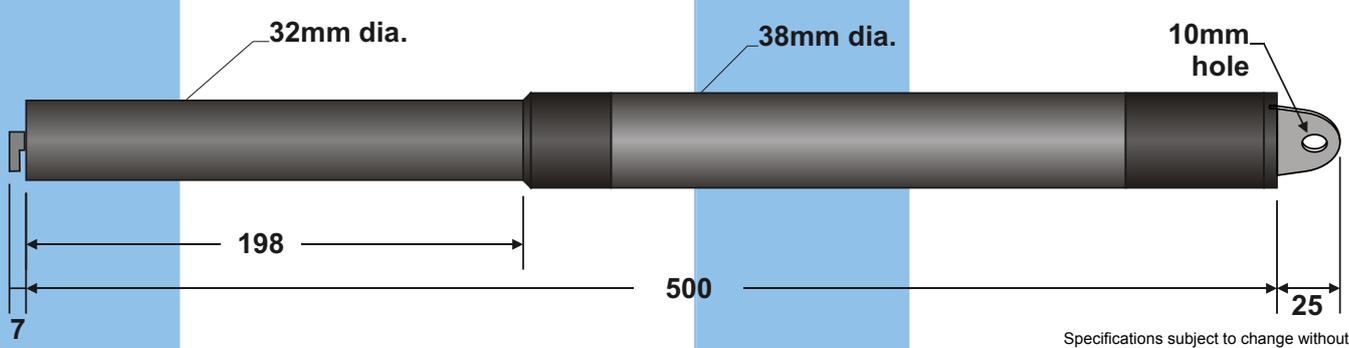
The ANALITE NEP495 probes are similar to the ANALITE NEP395 probe but with the inclusion of temperature measurement and a flexible self contained logging function. As normally supplied, the ANALITE NEP495 can store over 30,000 data sets with each data set consisting of turbidity, temperature, time and date. Logging intervals can be set from less than 1 second to over 18 hours. Data is stored in non-volatile memory.

The ANALITE NEP495 is self-contained requiring no external power or commands once logging has commenced. The internal batteries have a life expectancy of over 30,000 data sets or about 60 days - whichever comes first and assuming a wipe prior to each reading.

Specifications:

Technique	90° Infra-Red (ISO7027).	
Range	40, 100, 400 and 1,000NTU – set by user, factory default setting is 100NTU.	
Resolution	Range	Resolution
	40NTU	±0.01NTU
	100NTU	±0.02NTU
	400NTU	±0.1NTU
	1,000NTU	±0.2NTU
Repeatability	±1% at 25°C.	
Linearity	Better than 1% for 40NTU, 100NTU and 400NTU, 3% for 1,000NTU (using 3 point calibration).	
Temperature	-10°C to 50°C with ±0.1°C resolution and ±0.5°C accuracy. Time constant 50 seconds in water.	
Output	RS232 – 1200, 2400, 4800 or 9600BPS, 7 data bits, even parity, one stop bit. The factory default setting is 9600BPS.	
Measurements	<p>RS232 Realtime Latest turbidity measurement. Mean and Sample Variance. Median. Minimum. Maximum. Probe battery voltage. External (water) temperature.</p> <p>RS232 Logging Each logging point generates a data set containing: Turbidity in NTU Water Temperature in °C Time the data set was recorded. Date the data set was recorded.</p>	

Logging Interval	User set, from 1 second to over 18 hours in 1 second increments. Factory set to 900 seconds (15 mins).
Data Capacity	32,000 data sets minimum but depends on memory capacity installed in the probe. Memory technology is FlashRAM Logging stops when memory is full.
Calibration	Turbidity - 2 or 3-point calibration for each range. May be set by the user only through the RS232 interface and for the range selected. Can revert back to factory calibration settings after user calibration. Temperature – factory calibration only.
Power	3 off – C cells alkaline. 0.5mA STANDBY, 15mA ON. 40mA ON and wiping.
Wipe Time	8 seconds nominal.
Weight	1,800gms - including batteries.
Dimensions	532mm long overall, 38mm diameter.
Construction	316 Stainless steel casing. Screw on End Cap to allow battery replacement and PC connection via RS232 interface.
Depth Rating	100m (330ft) static water column.
Operating Temp.	-10°C to 50°C.
Storage Temp.	-20°C to 55°C.
Download Cable	3 meters with DB9 termination.
Accessories	Protective shroud for optics. NEP49SHRD 38mm dia. Replacement wiper kits NEP19WIPE.



Specifications subject to change without notice.
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