

MODEL NEP 160 Direct reading turbidity system



The ANALITE 160 turbidity meter is a direct reading, real time turbidity measuring instrument. It is battery powered and completely transportable for lab or field measurements.

It is designed to operate with either an ANALITE retro-scatter (180°) probe or an ANALITE 90° ISO 7027 probe.

The NEP 160 turbidity meter allows the user to set up measurement parameters through a user-friendly menu system displayed on the in-built 2 line digital alphanumeric display.

Measurements can be read directly from the display in real time or downloaded to a computer/printer through the RS232 output at user selectable intervals.

The NEP160 will power up automatically to its last settings whenever external power is applied making it ideal for logging applications when using the analogue output or RS232 port.

The NEP-160 system is supplied complete with battery charger and carry case.

Features:

- Completely portable using internal rechargeable battery
- Choice of probes (180° or 90°)
- Probes are rugged stainless steel
- Simple and easy to use and maintain
- Reads in absolute units or referenced to another solution
- Excellent linearity to over 20,000 NTU
- Four automatic ranges
- Note-book logging feature and RS-232 port
- Analogue output
- Automatic power-down to conserve battery



Specifications:

Range:	0 to 30,000NTU (3,000NTU limit on NEP260, 90° probe) (over four ranges automatically determined).
Display:	2 line, 16-character dot matrix alphanumeric liquid crystal display.
Display Language:	English standard, other languages available to order.
Parameters Displayed:	Turbidity (NTU) - default Relative Turbidity Reference (NTU) Relative Turbidity REL (Turbidity - Relative Turbidity Reference) Date/Time - default
Reading:	Updated approximately every 1 second.
Averaging period:	0.5 second or 8 seconds nominal – user selectable.
Auto Range Steps:	1 <0.1 to 20NTU 2 <1 to 200NTU 3 <10 to 2,000NTU 4 <100 to 30,000NTU (using NEP280, 180° probe only)
Resolution	1 0.02NTU 2 0.1 NTU 3 1 NTU 4 10 NTU
Repeatability:	2% ± 1 digit on all ranges.
Data Logging:	User set for one reading every 1 to 90 seconds or minutes. All readings stored in the Notepad.
Notepad:	100 readings each with time and date.
Setup Procedures:	Menu driven, including: <ul style="list-style-type: none">– Calibration– Automatic Logging– Analogue Output range selection– Reference Turbidity value– Setting date and time.
Setup Memory:	Non volatile memory.
Clock:	Calendar clock displays date and time.
Good Laboratory Practice:	All readings as well as calibration constants are stored together with the Time and Date and can be recalled at any time.
Analogue Output :	0 – 2 volts full scale corresponding to preset measurement range.
Output impedance:	600 ohms nominal.
Power: Internal:	6V NiMH rechargeable battery.
External:	10 to 16V dc, 400mA max. incl. NiMH Charge current.
Power Management:	External power connection is via jack plug male with 2.5mm pin. Centre pin is NEGATIVE polarity. Automatic power down when operating from batteries after approx. 5 minutes . Automatic power up when powered externally. Continuous operation of at least 5 hours on a fully charged battery.Low battery indication prior to shut down.
Measurement Outputs:	Inbuilt LCD, analogue output and RS232 port.
RS232 Port:	The RS232 port can output readings on request or at preset intervals of time from 1 to 99 seconds or minutes. The Notepad memory can also be downloaded on request. Data in ASCII delimited format. Configuration; 4800 baud, 8 bits, no parity, 1 stop bit, Xon/Xoff protocol.
Dimensions:	187mm x 110mm x 51mm (display unit).
Weight: Display Unit :	0.5kg.
180° Probe:	0.5kg with 5m lead.
90° Probe:	0.4kg with 5m lead.
Operating Temperature:	0° to 50°C.
Operating Humidity:	0 to 90% R.H.
Storage Temperature :	-10° to 60°C.
Case Rating:	IP65 with all connectors sealed with dust caps (supplied) or probe properly connected and dust caps on remaining two connectors.
Probe depth rating:	100m

Ordering Information:

NEP160-1-05R	NEP160 with general purpose NEP280 - 180° probe, 5m cable and carry case
NEP160-3-05R	NEP160 with NEP260 - 90° ISO 7027 probe, 5m cable and carry case
NEP160-2-05R	NEP160 with special high temperature NEP285 - 180° probe, 5m cable and carry case
NEP160-CBL-xx	Additional cable / metre max 40m
NEP160R	Display unit only.
NEP260-05	High Sensitivity 90° Probe for NEP160 Display Unit, 5m cable
NEP280-05	Wide Range 180° Probe for NEP160 Display Unit, 5m cable
NEP160-BAT	Optional Battery charger unit (UK Version only)

All probes are supplied with 5 meters of cable unless otherwise indicated at time of order.

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