HUMBOLDT

H-2680 & H-2682—
Maturity Meters

Maturity Testing Benefits (ASTM C1074)

Open pavements to traffic faster | Safely strip forms sooner | End reliance on field-cured test cylinders | Improve jobsite safety
Monitor in-place temperatures to ensure proper curing | Terminate external heating sooner
Speeds production by at least a day per pour on structural projects and more on pavement projects

Simple,
Reliable Design

H-2682

Humboldt Maturity Meters provide a predictable strength determination of cast-in-place concrete based on ASTM Standard C1074-98 (Estimating Concrete Strength by the Maturity Meter Method). These units utilize inexpensive, disposable, T-type thermocouple wire with quick-connect jacks, which can be embedded directly into a concrete structure to measure temperature at timed intervals. These readings can then be used to document the maturity process within the structure in order to:

- predict the time for form and shoring removal;
- estimate loading and post-tensioning time;
- control winter heating/insulation requirements, and
- reduce construction time and costs through accurate maturity readings.

The H-2680 and H-2682 are four-channel models, which provide the maturity number calculation, instant readout and temperature history on a menu-driven alphanumeric display. A communications port allows information to be transferred from the meter to another meter, printer or computer. The H-2682 provides the use of a rechargeable. nickel-cadmium battery, which can be used to enhance performance in cold weather applications.

H-2680 & H-2682— Maturity Meters

Specifications   Meet ASTM Standards: C1074 and C198

Thermocouple Wire:	Type T (Omega "flat pin" miniature)
Sensor Measurement Range (± 1°C):	-10°C to 90°C
Unit Environmental Range (± 1°C):	-10°C to 60°C

Data Record:

Memory Capacity:	32K
Data Capacity:	10 months x 4 channels
Recording Interval:	Every 1/2-hr. to 48 hrs., then every hr.

Power (Battery):

H-2680	9V Lithium (U9VL) or Alkaline Transistor-type
H-2682	9.6V NiCad with recharger or AC

Enclosure:

Case Materials:	Impact and Splash Resistant Polycarbonate
Dimensions:	7.8"(20cm) x 4.7"(12cm) x 2.9"(7cm)
Weight:	1.75 lbs (.8Kg)

Communications:

I/O Port	Serial RS-232C
Handshaking	XON/XOFF
Data Format	ASCII
Baud Rates	Up to 9600 –selectable

Maturity Value Calculations:

Constant Programmable Range Datum Temperature:	-20°C to 40°C
Equivalent Age Temperature:	0°C to -40°C
Activation Energy Constant:	0°K to 2x1040K
Maximum Maturity Values Displayed: Temperature/Time Factor:	99999°C hours
Equivalent Age Factor:	9999 hours

Specifications may change without notice

Ordering Information:

H-2680— Multi-channel Maturity Meter Set
Includes:
(4) Type-T thermocouple wire
and connectors
RS-232 communications cable
Plastic carrying case and user manual

H-2682— Rechargeable Multi-channel
Maturity Meter Set,
Includes: all the above, and comes
with a rechargeable nickel-cadmium
battery and a 120V battery charger/
AC adapter

Accessories

H-2670.1—	Thermocouple wire, 24 gauge, sold per foot (std.)
H-2670.IT—	Thermocouple wire, 20 gauge, sold per foot (heavy-duty)
H-2680P—	Plug for thermocouple wire to meter
H-2684—	Printer (Serial Port, Epson LX300, with H-2685 cable)
H-2682BP—	9.6V Rechargeable Ni-cad Battery Pack
H-2686—	Maturity meter to PC serial cable, 9-pin
H-2685—	Maturity meter to printer serial cable, 25-pin
H-2680B—	9V Lithium battery