

Eight Channel Digital Hydrometer Kit



- Measure Electrolyte Specific Gravity and Temperature
- 5 Second Measurements
- Save up to 8 tests in the 8 channel data logger
- Import the specific gravity data directly into Power DB

DESCRIPTION

The digital hydrometer kit accurately and quickly determines specific gravity of flooded cells. Simply draw the electrolyte into it; the specific gravity and temperature are determined in five seconds. It provides memory for both temperature and specific gravity for eight tests of 256 cells each. The stored data can be easily transferred to the accompanying data-logger. The data-logger can hold 8 separate sets of test data. The data can then be easily imported directly into a Megger Power DB battery report from the data-logger.

SPECIFICATIONS

DMA 35

Measuring range

Density: 0 g/cm³ to 3 g/cm³
 Temperature: 0 °C to 40 °C (3°F to 104°F)*
 Viscosity: 0 mPa·s to 1000 mPa·s

Accuracy

Density: 0.001 g/cm³ **
 Temperature: 0.2 °C (0.4 °F)

Repeatability, s.d.

Density: 0.0005 g/cm³
 Temperature: 0.1 °C (0.2 °F)

Ambient temperature

-10 °C to +50 °C (14 °F to 122 °F)

Supported measuring units

Specific gravity
 Alcohol tables
 Sugar/extract tables
 API functions
 H2SO4 tables
 Ten programmable custom functions

Sample volume

2 mL

Dimensions (L x W x H)

140 mm x 138 mm x 27 mm
 (5.5 x 5.4 x 1.0 inches)

Data memory

1024 measured results

Power supply

Two 1.5 V alkaline batteries

Weight

345 g (12.2 ounces)

Intrinsically safe

no

* Filling at higher temperatures possible

** Viscosity < 100 mPa·s, density < 2 g/cm³

*** Sample must not freeze within the measuring cell

BATTERY TEST

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AMBIENT TEMP. 25 °C DATE 10/11/2012 6:34 AM

SUBSTATION Production Floor HUMIDITY 30 % JOB # 1

POSITION LEAD ANTIMONY ASSET ID _____

EQUIPMENT LOCATION Repair Alcove

STRING

STRING NAME: LEAD ANTIMONY DUTY CYCLE: 17.8 Amps NUMBER OF CELLS: 24

INSTALLATION DATE: 7/10/2012 for 1 Hours NUMBER OF STRAPS: 23

HYDROMETER: START/SKIP CELLS: 1 / 1 to 1.88 VPC NUMBER OF CELLS / JAR: 1

VOLTS PER CELL: NOMINAL: 2.2

Show Battery Equipment Inspection Show Second Charger Show NERC Charger Nameplate Show Second NERC Charger Nameplate

CHARGER

MANUFACTURER: _____ BATTERY FLOAT CURRENT: _____ CHARGER CURRENT: _____ Amps

MODEL: _____ BATTERY RIPPLE CURRENT: _____ CHARGER VOLTAGE: _____ Volts

TEST AC CURRENT: _____ EQUALIZATION VOLTAGE: _____ Volts

DIAGRAM:

LIMITS: LOW VOLTAGE LIMIT (V): 2.2 VARIATION WARNING (%): 10.0 DEVIATION WARNING (%): 15.0 CHANGE WARNING (%): 5.0 STRAP WARNING (%): 10.0
 HIGH VOLTAGE LIMIT (V): 2.3 VARIATION ALARM (%): 20.0 DEVIATION ALARM (%): 20.0 CHANGE ALARM (%): 10.0 STRAP ALARM (%): 20.0

Display Impedance: Milli Ohms

Baseline Impedance: 2.6743 Avg. Impedance: 2.67 Total String Voltage: 52.87 Dev. from Charger: 0.2 % Min. Voltage: 2.17 Max. Voltage: 2.21 Avg. Temp: 70.1

#	NOTES	JAR DATA				VOLTAGE (volts)	TIME	MODEL	#	CELL DATA	
		IMPEDANCE (milli-ohms) VALUE	% DEVIATION (Relative)	% VARIATION (S/N)	% CHANGE (Prev.)					SPECIFIC GRAVITY	TEMP.
1		2.591	-3.1	-2.8		2.201	06:36		1	1.214	70.8
2		2.686	0.4	0.7		2.200	06:36		2		
3		2.647	-1.0	-0.8		2.204	06:37		3	1.214	70.3
4		2.657	-0.9	0.0		2.208	06:38		4		
5		2.721	1.4	2.0		2.200	06:39		5	1.214	70.4
6		2.500	-6.9	-6.3		2.211	06:40		6		
7		2.592	-3.1	-2.8		2.201	06:40		7	1.213	70.4
8		2.776	3.7	4.0		2.210	06:41		8		
9		2.652	-0.8	-0.6		2.205	06:42		9	1.214	70.3
10		2.597	-2.8	-0.4		2.209	06:43		10		
11		2.636	-1.4	-1.2		2.206	06:44		11	1.214	70.3
12		2.616	-2.2	-1.9		2.213	06:45		12		

TEST EQUIPMENT USED: _____ TESTED BY: Daryl Evans

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Power DB Battery report with imported hydrometer data.

ORDERING INFORMATION

Item (Qty)	Cat. No.
Hydrometer Kit	2001-692
Includes:	
Anton Paar Hydrometer	
8 Channel Data Logger	
Custom Carrying Case	
Communications Cable	
Software CD	
Hydrometer data logger kit - For use with Anton Paar Hydrometers	2001-693
Includes:	
8 Channel Data Logger	
Custom Carrying Case	
Communications Cable	
Software CD	
ERRATA Sheet (Configuration Instructions)	

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