



Hand Held BD5 DS1741

Densimeter

Ref: HDS1741IntE
Version:2002-01-13

Professional Density Measurement

- HBD5DS Embedded CPU Analyzer, full intelligent machine operation.
- Menu driven setup
- Read out, as inserted
- Smart test at any temperature, of any liquids
- Normal density and conversion to Standard density at pointed temperature
- Units conversion
- 1000s Data log. Auto recording or manual selection
- Memo read out, and print supported
- Versatile connection for any sampler or devices in lab or fields
- RS232/485 communication to PC
- Concentration test function
- Liquids concentration analysis

Advanced Sensor Design

- ◆ No moving parts or seals, minimizes maintenance
- ◆ Unaffected by vibration
- ◆ Insensitive to flow and pressure variations
- ◆ Wide range of materials available to suit most applications
- ◆ Approved for use in hazardous areas

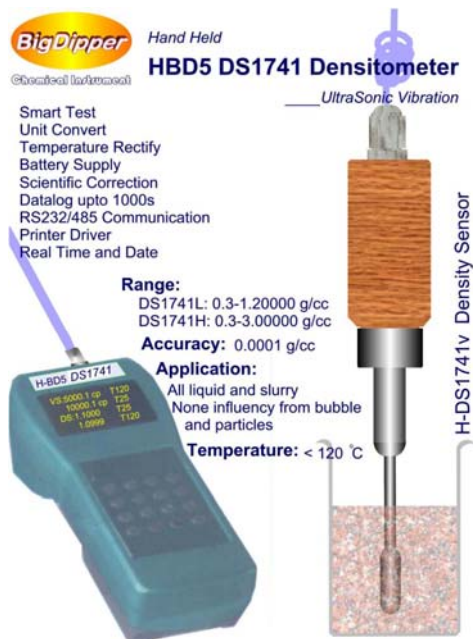
For speed, accuracy and reliability.
Test at any time anywhere, any temperature of any liquids
H-DS1741 is the best choice for smart density test!

HDS1741 is a portable densitometer for use in the lab, factory or field.

The solid stainless steel sensor is simply immersed into the fluid to obtain a reading of density. There is no limit on the size of vessel or fluid volume - just sufficient to cover the tip. Simply wipe clean after use.

Readings are given instantly on a LCD digital display. The meter and probe are lightweight, and combined with a long battery life makes the instrument truly portable.

The probe has no moving parts, seals or bearings and is well suited to everyday use in an industrial environment.



Functions

- **Normal Density Test**

The H-DS1741 gives professional density readout. No matter what is, and at what temperature it is

- **Standard Density Test**

Convert the tested epi-density into the equal data at pointed temperature.

This function is supported by density ~ temperature relations of the defined materials. It is always varies with different substances. Three ways were embedded into the analyzer: User input, user establish, using scientific model.

- **Units Conversion**

- API degrees
- Absolute and Referred Density
- Concentration by mass or volume

- **Concentration Analysis**

- 1) Exact concentration calculation of two ingredients compound, based on density database.
- 2) Modelling calibration by user

Modern Electronics

- BD5 CPU based STIM, perfect design with complete instrument functions
- 4*5 20 Keypad, and 2*20 LCD display
- RS232 serial port always available
- RS485 with STIMcom or Modbus protocol
- Rechargeable Li battery power supply, 1 week stanby
- Intrinsic safe design
- Serial printer supported
- Data record, store, and readout
- IAP program update support possible in future

For more information about BD4/5 electronics, please refer to URL: <http://www.fullsense.com/Products/Meters/>

Typical applications

- Fiscal metering
- Slurries
- Food processing
- General chemicals
- Hydrocarbons
- Resource management

Specifications

Density operating range:	0 to 3g/cc (0 - 3000kg/m3)
Calibrated range:	0.6 to 1.25g/cc (600 - 1250kg/m3)
Accuracy:	0.001g/cc (1.0kg/m3)
Repeatability:	0.0005g/cc (0.5kg/m3)
Temperature range (fluid):	-50 to +120,250,400 °C
Density range:	up to 20,000cP
Max. pressure:	1.6MPa
Environment:	IP66
Power Supply:	9 to 24Vdc, 100mA EEx d IIc T4
Safety approvals:	CSA Class 1, Division 1, Group C (pending)

Ordering Information

Wetted materials

Stainless steel, Hastelloy C

Tine Finish

Standard, PTFE coated or Electropolished

Connections

ANSI 150 to 1500RF; DIN 50 PN40 and PN100 1.5" compression; IDF and RJT hygienic

Meter Version

H-BD5DS1741 C	Normal	Normal density, temperature compensated
H-BD5DS1741 Pro	Professional	User establish the temperature converting model
H-BD5DS1741 ATC	Scientific	Using database by scientific formulae

Meter and Included Accessories

Sensor	H-DS1741	1 included
Meter	H-BD3/5	1 included
Cell	9V	1 included
Charger	220V	1 included
Package		1 included
Accessories	Fit ZG1"	Pipeline connector
	FitSeal25	Glass device connector

Selective Accessories

Printer	up24
Wire	
Paper	Common meter paper
PC Software	Win HDS1741.1
RS485 Kit	Converter to RS232 on PC

Package: 465*370*112 (mm)

Delivery Weight: 2.5-3 kg

BIG DIPPER TECHNOCHEM INSTITUTE

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<http://www.fullsense.com/> Email: sales@fullsense.com



BD4Controller & BD5 STIM

<http://www.fullsense.com/Meters/>

BD4&5Introduction: http://www.fullsense.com/Meters/BD4_IntE.htm

BD4&5 Functions: http://www.fullsense.com/Meters/BD4_TB_E.thm

BD4&5 Selection: http://www.fullsense.com/Meters/BD4_Sel_E.htm

BD4_5Configuration: http://www.fullsense.com/Meters/BD4_Cfg_E.htm

BD4Application: http://www.fullsense.com/Meters/BD4_AG_E.htm

Related Technical References:

<http://www.fullsense.com/Network/>

Scm Protocol

STIMcom Protocol

IEEE1451.1 NCAP Protocol

IEEE1451.2 STIM Protocol