

Bench Scales



ANY-WEIGH™ Series

Applications

- Check Weighing
- Filling
- Laboratory
- Force



Features

• ANY-WEIGH™ Standard Features:

- Stainless Steel
- Solid Construction
- Low Profile

• Universal:

- C2® Electronic Calibration

• Analog:

- Built-in 4-20mA Communications
- Pre-Calibrated

• DeviceNet:

- Built-in DeviceNet Communications
- Pre-Calibrated
- WAVERSAVER®
- C2® Electronic Calibration
- THE BUTTON®: One-Touch Cal

HARDY
INSTRUMENTS

The ANY-WEIGH™ Bench scales provide value and flexibility in size and capacity for use in a wide range of weighing applications. With their rugged construction and stainless steel tops, the ANY-WEIGH™ Scales are a great fit for both laboratory and industrial installations.

The ANY-WEIGH™ line of bench scales is available with standard interfacing to a weight instrument or with a built-in, direct connection to a PLC or PC.

UNIVERSAL SCALE

Directly attach the scale's 15-foot cable to any strain gage based weighing instrument or controller. The scale is protected from damage by shock or excessive load. If interfacing with a Hardy Controller, you can take full advantage of WAVERSAVER®, and C2® Electronic Calibration.

DEVICENET SCALE

DeviceNet
CONFIDENCE TESTED

With its built-in DeviceNet interface you can use this scale to provide a weight output to any point on a DeviceNet network. It comes pre-wired and pre-calibrated from the factory.

Just set an address, connect to your network, configure and you're up and running. The scale features outputs for Gross, Net and Tare weight values and inputs for Zero and Tare commands. A Command interface provides easy access to all parameters without the need for explicit messages.

Need to recalibrate? One push of "THE BUTTON®" automatically recalibrates the scale. The scale also supports C2® electronic calibration over its DeviceNet interface. Vibration on the scale is no problem with built-in WAVERSAVER® technology. WAVERSAVER® eliminates the effects of vibration on the scale resulting in a clean accurate weight signal being transmitted over DeviceNet. The scale provides 20-bit resolution with a selectable conversion rate choice of 10 or 55 updates per second.

ANALOG SCALE

Use the Analog output scale to provide a 4-20mA output directly proportional to the weight reading. This version offers a low-cost, effective solution for bringing an analog weight reading directly into a control system, with minimal additional wiring or hardware, and comes with a 15-foot two-wire shielded cable. The scale comes pre-calibrated from the factory but provides potentiometers for coarse and fine zero adjustment as well as span.

COMPONENTS TO COMPLETE YOUR HARDY INSTRUMENTS SYSTEM FOR:

- Filling & Dispensing
- IBC Dispensing
- Batching/Blending
- Check Weighing
- Flow Rate Monitoring
- Flow Rate Control
- Force Measurement
- Level Measurement/Control
- Weighing Instruments Dedicated to Your Applications: Controllers, Weigh Modules, Transmitters



Allen-Bradley Compatible Plug-in Weigh Scale Modules



HI 3000 Series Controllers

• Communication Interfaces

Allen-Bradley PLC®, ControlLogix®, SLC®, DeviceNet®, Remote I/O, Profibus, Analog, and Serial.



• C2® Certified Cable

This 8-conductor cable is specifically designed for reliable communication of weight and C2 data from the junction box to the instrument.



SPECIFICATIONS

Universal Scale

- **Rated Output:** 0.900 ± 0.0009mV/V
- **Combined Error:** 0.030 %R.O.
- **Creep @ 30 min:** 0.030 %R.O.
- **Zero Balance:** 5.0 % R.O.
- **Temp Effect Output:** 0.0015% R.O./ °F
- **TempEffect Sensitivity:** 0.0008 % R.O./ °F
- **Comp.Temp. Range:** -10 - +40°C
- **Oper. Temp. Range:** -10 - +65°C
- **Input Resistance:** 297.5 ± 10% ohm
- **Output Resistance:** 250 ± 5% ohm
- **Excitation:** 5-15 Volts
- **Safe Load Limit:** 300 % Emax
- **Ultimate Load:** 400 % Emax
- **Max. Cornering Error:** 0.06% 1/2 full scale load, 1/2 way to corner

DeviceNet Out

- **Resolution:** 20 bit
- **Update Rate:** 10 or 55 per second depending on WAVERSAVER settings
- **Averages:** 0-255 selectable
- **Temp Coefficient:** <0.0023%/C
- **Input Power:** 11-25VDC
- **Type:** Generic
- **I/O Slave Messag.:** Polling
- **Baud Rates:** 125K, 250K, 500K
- **Inputs:** Gross, Net, Tare
- **Outputs:** Weight: Metric/Engl., Zero & Tare, WAVERSAVER, Calib. Type, Span Weight (Hard Cal), Cal Low Value, Cal High Value, # of Averages

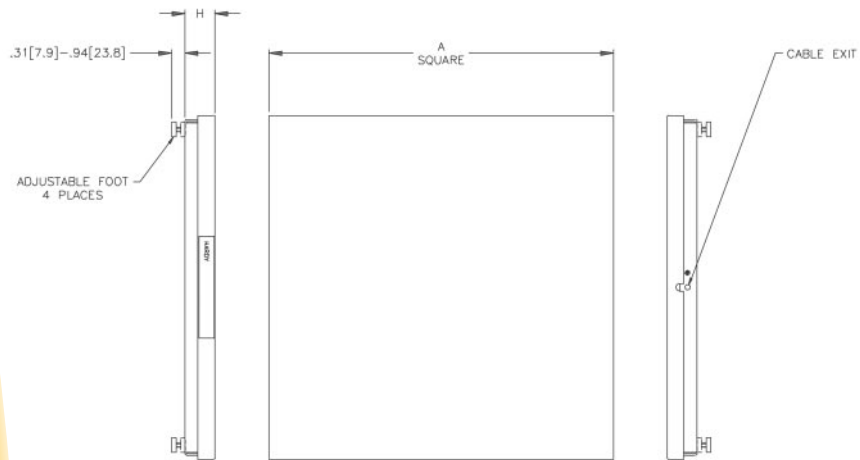
Analog Out

- **Loop Power:** 15-50VDC across scale.
A 15V min. would be with 0 ohm load; add 20mV/ohm to the min. loop voltage. A 500 ohm load would require 25V min. loop voltage.
- **Linearity:** 0.11% of full scale
- **Response Time:** 250 milliseconds
- **Temp. Range:** 0 to 60°C
- **Temp. Coefficient:** 0.025%/°C

DIMENSIONS

MODEL	A SIZE in. (mm)	CAPACITY lb (kg)					
		33 (15)	66 (30)	130 (60)	330 (150)	660 (300)	1300 (590)
HI 1212SBU/D/A	12x12 (298x298)	X	X	X			
HI 2020SBU/D/A	20x20 (500x500)			X	X	X	X
HI 2424SBU/D/A	24x24 (600x600)			X	X	X	X
		HEIGHT (H) in (mm)					
HI 1212SBU/D/A		1.54 (39.1)	1.56 (39.6)	1.62 (41.2)			
HI 2020SBU/D/A				1.65 (41.9)	1.68 (42.7)	1.87 (47.5)	2.05 (52.1)
HI 2424SBU/D/A				1.65 (41.9)	1.68 (42.7)	1.87 (47.5)	2.05 (52.1)

ANY-WEIGH™ SCALE OUTLINE



To learn more about the ANY-WEIGH™ Bench Scales, visit our web site:

www.hardyinst.com

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