

Model HI 6020 **Summing Box**













ApplicationsPROCESS WEIGHING

- Batching/Blending
- · Filling/Dispensing
- · Level-by-Weight
- Inventory Management

Features

The Hardy Process Toolbox

The Hardy Process Toolbox is a set of productivity tools that support process weighing functions.

Each tool saves time, increases accuracy, improves efficiency or reduces risk in weighing applications.



C2® Electronic Calibration

Electronic calibration without test weights

INTEGRATED TECHNICIAN™

Complete weighing system monitoring and troubleshooting

NEMA 4X Enclosure

• Water and corrosion resistant

IT or JB SUMMING BOX

The Hardy HI 6020 Summing box is a critical component in a weighing system that enables use of Hardy's core technologies - $C^{(R)}$ electronic calibration and Integrated Technician (IT).

Each summing box distributes excitation voltage to up to four load cells and transfers each load cell's performance characteristics and weight signals to the Hardy weighing instrument. A summing card with IT allows a weighing instrument operator to switch to the summing card's internal test circuit and diagnose the entire weighing system from the front panel of the instrument or a remote location over the Internet. Individual load cells can be isolated from each other for weight and voltage readings, allowing a technician or operator to quickly and safely troubleshoot weighing system faults and anomalies.

The HI 6020 Summing box is available with a variety of options, including IT, trim pots (for non-Hardy load cells) and a NEMA 4X enclosure in stainless steel, painted steel or fiberglass. The enclosure features a thick-wall design with an interior seal for a long lasting, robust wash-down installation. The NEMA 4X stainless steel models are designed for Hazardous Locations and come with either Class I, II, III, Division 1, Class I, Zone 0 and Zone 20 for the U.S. or ATEX and IECEx certifications for International.

A single HI 6020 Summing box supports up to 4 load cells. To connect two HI 6020 Summing Boxes together to support between 5 and 8 load cells, use the TB6 Auxiliary connection between boxes. Stainless Steel summing boxes ith the TB6 option come with 6 holes instead of the standard 5 holes.

SPECIFICATIONS

Max number of Load Cells

• 8 (with two junction boxes)

Enclosure

- Choice of None, Stainless Steel, Painted Steel or Fiberglass <u>Hazardous Area Certifications</u>
- HI6020IT-SSX-Y and HI6020JB-SSX-Y: USL/CNL Class I, II, III, Div 1 Groups ABCDEFG intrinsically safe per drawing 0594-0007 and 0594-0008
- HI6020JB-SSX-Y-EX and HI6020IT-SSX-Y-EX models: ATEX & IECEx Ex ia IIC T4 intrinsically safe per drawing 0594-0011 and 0594-0012 ATEX Certificate No. DEMKO 17 ATEX 1819; IECEx Certificate No. IECEx UL 17.0009
- HI6020IT and HI6020JB: USL/CNL Class I, II, III, Div 2, Groups ABCDFG (except -EX versions)

PCB Dimensions

- 4.88" (12.38 cm) x 4.88" (12.38 cm)
- Removeable Phoenix Terminal Block
- 7 pin, 1 row, 3.5 mm pitch

Auxiliary Port for Connecting Junction Boxes

TB6

Predrilled Hole Size

• 0.875 inches (22.2 mm)

Temp Range

• $-10 \text{ to } +60^{\circ}\text{C} \text{ (14 to 140°F)}$

Max Current Consumption with Integrated Technician:

- 58mA with 4 x 350 ohm load cells
- 116mA with 8 x 350 ohm load cells
- 19mA with 4 x 1100 ohm load cells
- 38mA with 8 x 1100 ohm load cells

Max Current Consumption with Trimming Pots:

- 58mA with 4 x 350 ohm load cells
- 116mA with 8 x 350 ohm load cells
- 19mA with 4 x 1100 ohm load cells
 - 38mA with 8 x 1100 ohm load cells

Continued on Reverse Side

SPECIFICATIONS Cont.

Power Ratings

- HI6020IT: 5 VDC, Class 2, max. 50 mA
- H16020JB (sum card, fiberglass & painted steel):
 2-15 VDC, Class 2, max. 275 mA
- HI6020JB Stainless Steel for Hazardous Areas:
 5 VDC, Class 2, max. 50 mA
- H16020IT & H16020JB Class I, Div 1 versions: Power must be supplied through approved intrinsically safe barriers per control drawing 0594-0007 (H1 6020JB) or 0594-0008 (H16020IT)
- HI6020IT & HI6020JB ATEX and IECEx versions: Power must be supplied through approved intrinsically safe barriers per control drawing 0594-0011 (HI6020JB) or 0594-0012 (HI6020IT)

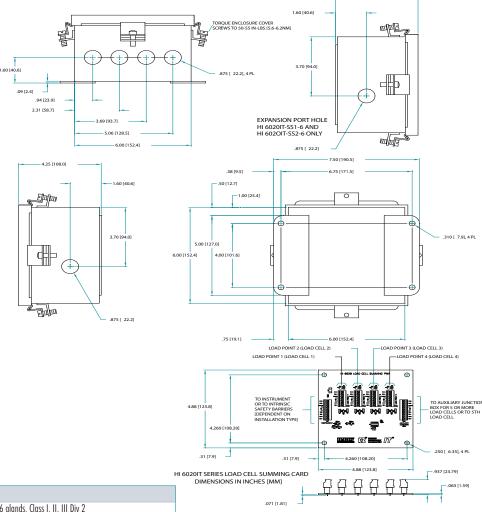
Holes/Glands

- 5 holes (standard)
- 6 holes (for TB6 connections)
- Non ATEX/IECEx versions: Each box comes packaged with six hole plugs and cable grip fittings for load cell cables with an outside diameter of .169 to 0.449 in (4.3 to 11.4 mm).
- ATEX/IECEx (-EX versions): Does not include glands or hole plugs. For use with Intrinsic Barriers Only

Warranty

• Two-year warranty against defects in workmanship

HI 6020 SUMMING BOX (STAINLESS STEEL IT, CLASS I, II, III, DIV 1 ENCLOSURE SHOWN)



ORDERING INFORMATION

MODEL #	DESCRIPTION
HI6020IT-PS1	Integrated Technician NEMA 4/1P66 Painted Steel, 5 holes/6 glands, Class I, II, III Div 2
HI6020IT-FG1	Integrated Technician NEMA 4X/IP66 Fiberglass, 5 holes/6 glands, Class I, II, III Div 2
HI6020IT-SC1	Integrated Technician Summing Card, no Enclosure
HI6020IT-PS2	Integrated Technician NEMA 4/IP66 Painted Steel with Trim Pots*, 5 holes/6 glands, Class I, II, III Div 2
HI6020IT-FG2	Integrated Technician NEMA 4X/IP66 Fiberglass with Trim Pots*, 5 holes/6 glands, Class I, II, III Div 2
HI6020IT-SC2	Integrated Technician Summing Card with Trim Pots*, no Enclosure
HI6020JB-PS1	NEMA 4/IP 66 Painted Steel, 5 holes/6 glands, Class I, II, III Div 2
HI6020JB-FG1	NEMA 4X/IP 66 Fiberglass, 5 holes/6 glands Class I, II, III Div 2
HI6020JB-SC1	Summing Card, no Enclosure
HI6020JB-PS2	NEMA 4/IP 66 Painted Steel with Trim Pots*, 5 holes/6 glands, Class I, II, III Div 2
HI6020JB-FG2	NEMA 4X Fiberglass with Trim Pots*, 5 holes/6 glands, Class I, II, III Div 2
HI6020JB-SC2	Summing Card with Trim Pots*, no Enclosure
HI6020IT-SS1	Integrated Technician Summing Card in Stainless Steel Enclosure, 5 holes/6 glands, Class I, II, III Div 1
HI6020IT-SS1-6	Integrated Technician Summing Card in Stainless Steel Enclosure, 6 holes/6 glands, Class I, II, III Div 1
HI6020IT-SS1-6-EX	Integrated Technician Summing Card in Stainless Steel Encl., 6 holes, 0 glands, ATEX, IECEx
HI6020IT-SS1-EX	Integrated Technician Summing Card in Stainless Steel Enclosure, 5 holes, 0 glands, ATEX, IECEx
HI6020IT-SS2	Integrated Technician Summing Card in Stainless Steel Enclosure with Trim Pots, 5 holes/6 glands, Class I, II, III Div 1
HI6020IT-SS2-6	Integrated Technician Summing Card in Stainless Steel Encl., w Trim Pots, 6 holes/6 glands, Class I, II, III Div 1
HI6020IT-SS2-6-EX	Integrated Technician Summing Card in SS Enclosure, 6 holes/O glands, with Trim Pots, ATEX, IECEx
HI6020IT-SS2-EX	Integrated Technician Summing Card in SS Enclosure, with Trim Pots, 5 holes/O glands, ATEX, IECEx
HI6020JB-SS1	Summing Card in Stainless Steel Enclosure, 5 holes/6 glands, Class I, II, III Div 1
HI6020JB-SS1-6	Summing Card in Stainless Steel Enclosure, 6 holes/6 glands, Class I, II, III Div 1
HI6020JB-SS1-6-EX	Summing Card in Stainless Steel Enclosure, 6 holes/O glands,, ATEX, IECEx
HI6020JB-SS1-EX	Summing Card in Stainless Steel Enclosure, 5 holes, 0 glands, ATEX, IECEx
HI6020JB-SS2	Summing Card in Stainless Steel Enclosure with Trim Pots, 5 holes/6 glands, Class I, II, III Div 1
HI6020JB-SS2-6	Summing Card in Stainless Steel Enclosure, with Trim Pots, 6 holes/6 glands, Class I, II, III Div 1
HI6020JB-SS2-6-EX	Summing Card in SS Enclosure, with Trim Pots, 6 holes, 0 glands, ATEX, IECEx
HI6020JB-SS2-EX	Summing Card in SS Enclosure, with Trim Pots, 5 holes, 0 glands , ATEX, IECEx

^{*}Trim Pots are NOT compatible with C2 Load Cells



9440 Carroll Park Dr.
San Diego, CA 92121
tel. +1-858-278-2900
tel. 800-821-5831
fax +1-858-278-6700
www.hardysolutions.com
hardyinfo@hardysolutions.com

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