

NTEP CERTIFIED Conveyor Belt Scale Monitor and Software package.



AUDITOR™



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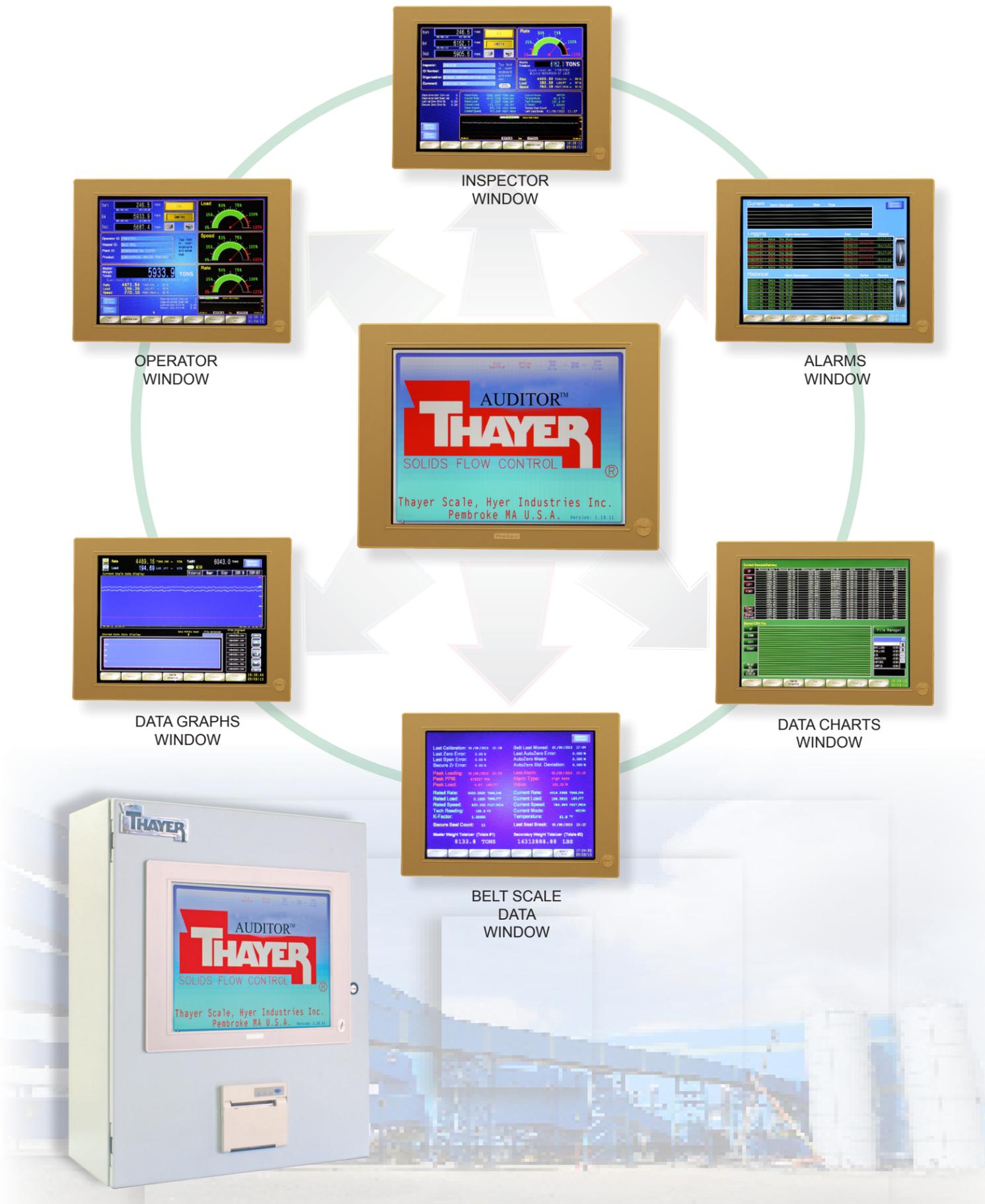
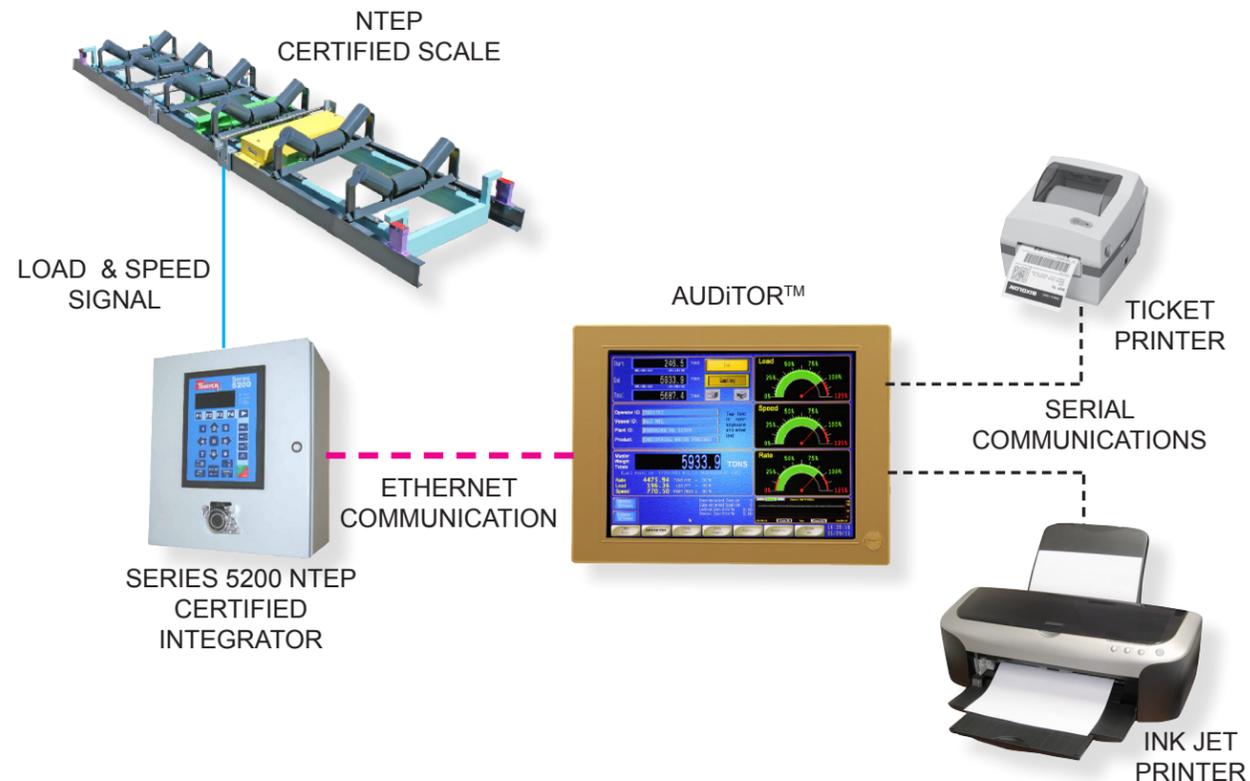
THAYER AUDITOR™ is a PC based data collection and software package running on an industrial PC (IPC). It provides a link between a plant and the Series 5200 NTEP approved secure in integrator. It has been designed to meet the requirements if NTEP, AAR and HB-44 for rate trending and printing of delivies with date and time stamping.

The AUDITOR™ package provides users the ability to monitor scale performance at a glance and present statutory authority information necessary to certify a belt scale and installation. Information is presented on multiple viewing screens. Rate and delivery data is stored on CompactFlash® and can be recalled for viewing screens.

The IPC comes with a licenced operating system preinstalled. The operating system resides on the (provided) CompactFlash®. It is Microsoft Windows®- Windows® embedded Standard. It performs the standard computer functions found on all PC systems. It provides interface to external devices via USB, serial and Ethernet drivers.

Software Features:

- **Real-Time data Display**
 - *Convey Rate*
 - *Rated Load*
 - *Current Load*
 - *Rated Speed,*
 - *Current Speed*
 - *Temperature*
 - *Tach Reading*
 - *Totalization*
- Audit trails are maintained for all alarms and calibration adjustments.
- Historical Reporting
 - *Days since last Zero Calibration*
 - *Days since last Span Calibration*
- Last Calibration error %
- Secure Zero Error %
- Ticket Printing



MAIN OPERATOR SCREEN

Delivery data

Start: 25540459.5 LBS (03/13/14 13:14:07) End: 25540585.1 LBS (03/13/14 13:14:24) Total: 125.6 LBS

User entered data

Operator ID: ROBERT OPERATOR
 Vessel ID: R&D MXL
 Plant ID: PEMBROKE MA 02359
 Product: INDUSTRIAL WEIGH FEEDERS

Live Scale Data

Master Weight Totals: 25540585.1 LBS
 Rate: 27454.00 LBS/HR = 76%
 Load: 9.12 LBS/FT = 91%
 Speed: 50.18 FEET/MIN = 84%

Gauges: Load (50%), Speed (50%), Rate (50%)

Bottom Panel: Screen selection buttons (Title/Logo, OPERATOR, Data Charts, Data Graphs, Alarms, Inspector, Scale Info), Current Date/Time (13:14:24 03/13/14)

DATA GRAPH SCREEN

Current Scale Data Display

Rate: 13068.00 LBS /HR = 36% Tot#1: 9778.78 LBS
 Load: 7.19 LBS /FT = 72% WEIGH: Zero Balance

Stored Rate Data Display

Data Points Read: 720 File Selected: 140312.JS.CSV

Bottom Panel: Screen selection buttons (Title/Logo, Operator, Data Charts, DATA GRAPHS, Alarms, Inspector, Scale Info), Current Date/Time (10:24:11 03/21/14)

The Data Graph Screen of the AUDiTOR software presents rate and load data in graphical format. The upper graph shows current scale information. The lower graph presents past data for recalled viewing.

DATA CHARTS SCREEN

Current Sample/Delivery

	Running Rate	Running Load	MHTotalizer	Totalizer #2	Date	Time	Status Word #1
UP	33563.28	10.84	28406125.000	28406122	03/17/14	15:49:46	301
DOWN	33563.88	10.84	28406142.000	28406142	03/17/14	15:49:48	301
LEFT	33563.88	10.84	28406160.000	28406160	03/17/14	15:49:50	4301
RIGHT	33563.28	10.84	28406178.000	28406178	03/17/14	15:49:52	4301
Oldest (Top)	33563.48	10.84	28406198.000	28406198	03/17/14	15:49:54	4301
Newest (Bottom)							

Stored CSV File

UP, DOWN, LEFT, RIGHT, PRINT ALL, PRINT DISPLAY, File Manager, Print Screen

Bottom Panel: Screen selection buttons (Title/Logo, Operator, DATA CHARTS, Data Graphs, Alarms, Inspector, Scale Info), Current Date/Time (15:49:55 03/17/14)

The Data Charts screen of the Auditor software displays two types of information in table format. The upper half of the screen shows data associated with the current, or most recent completed delivery. The bottom half gives the user the ability to recall past data that was automatically stored in CSV files.

ALARMS SCREEN

Current

Alarm Description	Date	Time
OPERATING - Rate Too Low	03/28/14	16:43
OPERATING - Load Too Low	03/28/14	16:43

Logging

Alarm Description	Date	Active	Cleared
OPERATING - Rate Too Low	03/28/14	16:43:46	
OPERATING - Load Too Low	03/28/14	16:43:45	
OPERATING - Rate Too Low	03/28/14	16:43:28	16:43:28
OPERATING - Speed Too Low	03/28/14	16:43:28	16:43:28
OPERATING - Rate Too Low	03/28/14	16:43:27	16:43:28
OPERATING - Speed Too Low	03/28/14	16:43:25	16:43:28
OPERATING - Rate Too High	03/28/14	14:19:38	
OPERATING - Rate Too High	03/28/14	14:17:50	

Historical

Alarm Description	Date	Active	Cleared
OPERATING - Rate Too Low	03/28/14	16:43:46	
OPERATING - Load Too Low	03/28/14	16:43:45	
OPERATING - Rate Too Low	03/28/14	16:43:27	16:43:28
OPERATING - Speed Too Low	03/28/14	16:43:25	16:43:28
OPERATING - Rate Too High	03/28/14	14:17:50	14:19:38

Bottom Panel: Screen selection buttons (Title/Logo, Operator, Data Charts, Data Graphs, ALARMS, Inspector, Scale Info), Current Date/Time (16:44:11 03/28/14)

The Alarms screen of the AUDiTOR presents all current and past instrument alarms. Only the alarms programmed in the SEIES 5200 instrument are presented.

SCALE INFORMATION SCREEN

Zero Bal. Status: Within Limits Show Zero Logs Print Screen

Last Calibration: 01/10/2014 16:03 Belt Last Moved: 03/31/2014 09:41
 Last Zero Error: 0.00% Last AutoZero Error: 0.000%
 Last Span Error: 0.00% AutoZero Mean: 0.000%
 Secure Zr Error: 0.00% AutoZero Std. Deviation: 0.000%

Peak Loading: 03/31/2014 08:57 Last Alarm: 03/31/2014 08:58
 Peak PPM: 443555 PPM Alarm Type: High Load
 Peak Load: 11.66 LBS/FT Value: 101.95%

Rated Rate: 36000.0000 LBS/HR Current Rate: 29507.1992 LBS/HR
 Rated Load: 10.0000 LBS/FT Current Load: 9.8200 LBS/FT
 Rated Speed: 60.000 FEET/MIN Current Speed: 50.089 FEET/MIN
 Tach Reading: 667.8 Hz Current Mode: WEIGH
 K-Factor: 1.00000 Temperature: 77.0 °F

Secure Seal Count: 17 Last Seal Break: 03/31/2014 08:54

Master Weight Totalizer (Totals #1) Secondary Weight Totalizer (Totals #2)
 33325513.7 LBS 33325513.67 LBS

Buttons: Title/Logo, Operator, Data Charts, Data Graphs, Alarms, Inspector, SCALE INFO, 10:38:56, 03/31/14

This screen provides the most information about the scale itself. It summarizes what the conditions are regarding the scale.

INSPECTOR SCREEN

Delivery data: Start 33310998.5 LBS, End 33325179.1 LBS, Total 14180.6 LBS

User entered data: Inspector: GEORGE, ID Number: 123-555-1212, Organization: SCALE CERTIFICATION CO., Comment: INITIAL TEST

Scale Status Data: Master Totalizer 33325242.7 LBS, Rate 29505.20 LBS/HR (82%), Load 9.82 LBS/FT (98%), Speed 50.09 FEET/MIN (83%)

Scale Status Data: Rated Rate, Current Rate, Rated Load, Current Load, Rated Speed, Current Speed, Current Mode, Temperature, Tach Reading, K-Factor, Secure Seal Count, Last Seal Break

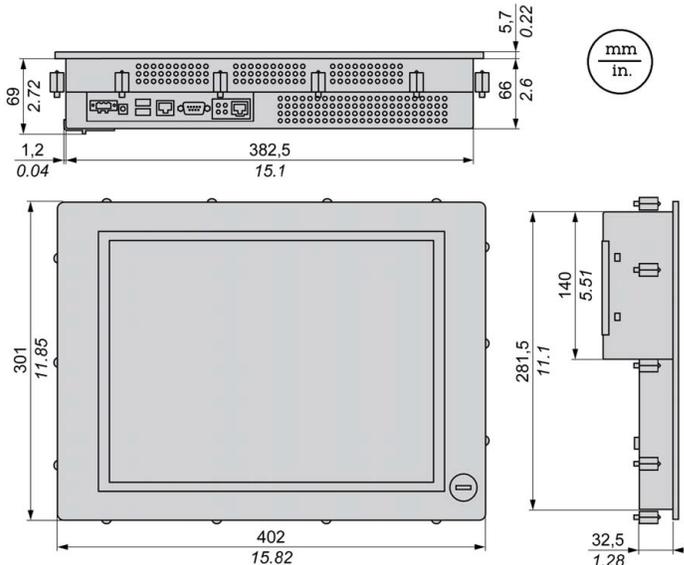
Graph of Rate During Delivery: Rate gauge showing 50% to 125% range.

Buttons: Begin, Press Begin to Record Delivery, Clear All Fields, Print Screen, Save Screen, Title/Logo, Operator, Data Charts, Data Graphs, Alarms, INSPECTOR, Scale Info, 10:38:23, 03/31/14

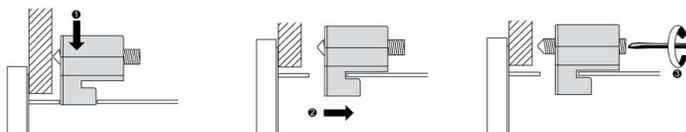
The Inspector screen is similar to the operator screen as far as the data that is presented. It has been provided to assist the regulatory agency by providing information most likely required by them in a single presentation.

Basic Functional Specs.	
Display Size"	15"
Display Colors	16 Million
Backlight	LED, Life span > 50,000 h @ 25 °C [77 °F]
Brightness Control	Step less adjustment
Supported OS	CF: Windows® Embedded Standard 2009
CPU	Atom™ Z510 1.1 GHz
L2 Cache Memory	512 KB
Main Memory	1 GB to 2 GB max. (DDR2 400 MHz)
Chipset	Intel® System Controller Hub US15W
Graphics Accelerator	Intel® Graphics Media Accelerator 500
Video Memory	Up to 256 MB
Graphics	XGA TFT active matrix (1,024 x 768 pixels)
Touch Panel Type	Analog resistive film
Touch Panel Resolution	4,096 x 4,096
IDE	4 GB CF Card (Type-I) x1
Serial (COM1)	RS-232C (D-Sub 9-pin, plug)
Ethernet (LAN1)	10/100/1000 Mbit/s (RJ-45 Modular jack)
USB (TYPE-A)	USB 2.0 x3
International Safety Standards	Rated Input Voltage
Rated Input Voltage	24 Vdc ±25 %
Power Consumption	31 W
In-Rush Current	Typ. 3 A, max. 50 A < 300 µs
Surrounding Air Temperature	0 to 50 °C (32 to 122 °F)
Storage Temperature	-20 to 60 °C (-4 to 140 °F)
Ambient Humidity	10 to 85 % RH (Wet bulb temperature: 29 °C [84.2 °F] max. -no condensation)
Storage Humidity	10 to 85 % RH (Wet bulb temperature: 29 °C [84.2 °F] max. -no condensation)
Pollution Degree	For use in Pollution Degree 2 environment
Air Pressure (altitude range)	2,000 m [6,560 ft] max.
Vibration Resistance	Operation (continuous) 2 to 9 Hz: 1.75 mm [0.07 in.], 9 to 200Hz: 4.9 m/s ² Operation (occasional) 2 to 9 Hz: 3.5 mm [0.14 in.], 9 to 200 Hz: 9.8 m/s ² Merchant Navy (continuous): 3 to 13.2 Hz: 1 mm [0.04 in.], 13.2 to 100 Hz: 6.86 m/s ² Shock Resistance (in operation): 147 m/s ² for a duration of 11 ms (IEC 60068-2-27 Ea test)
Electromagnetic Compatibility (EMC)	Immunity to High Frequency Interference Electromagnetic Emissions Class A
Structure	Front: IEC60529 IP65, UL0E Type 4X
Cooling Method	Passive heat sink, Fanless operation
Weight Approx.	5.0 kg [11.0 lbs]
External Dimensions	W402 x H301 x D74.7 mm [W15.82 x H11.85 x D2.94 in.]
Panel Cut Dimensions	W383.5 x H282.5 mm [W15.10 x H11.12 in.]

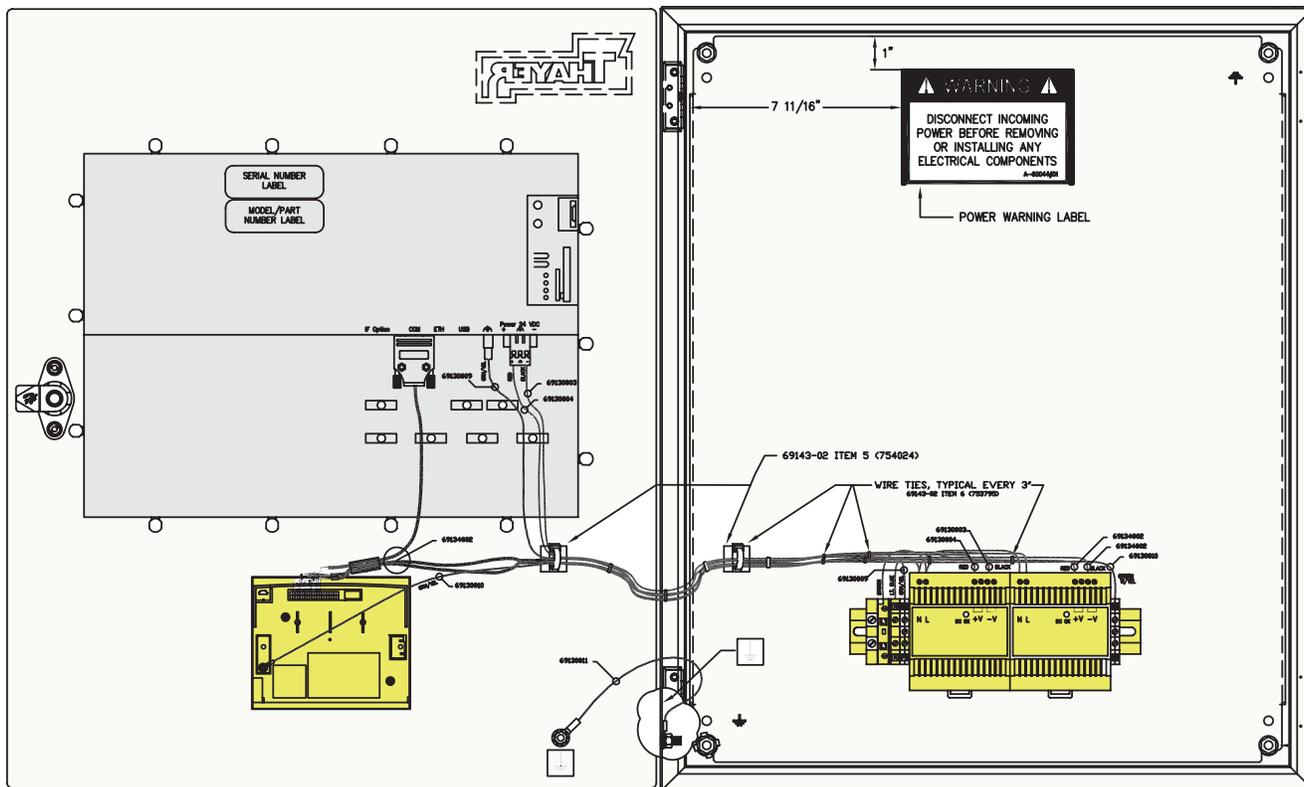
Chassis Mount Auditor Panel



There are 14 slots located around the IPC for mounting clips (provided). Insert each clip into the slot, slide toward rear of IPC, and tighten each fastener to 4.5 lb-in (0.5 N-m) to lock IPC to panel.



Panel Mount Auditor with Printer



24" H x 20" W x 8" D



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