

PLU Lite
Software for the ZK830



Installation and Operation Instructions

Avery Weigh-Tronix is a trademark of the Illinois Tool Works group of companies whose ultimate parent company is Illinois Tool Works Inc ("Illinois Tool Works"). Copyright © 2018 Illinois Tool Works. All rights reserved.

No part of this publication may be reproduced by making a facsimile copy, by the making of a copy in three dimensions of a two-dimensional work and the making of a copy in two dimensions of a three-dimensional work, stored in any medium by electronic means, or transmitted in any form or by any means, including electronic, mechanical, broadcasting, recording or otherwise without the prior written consent of the copyright owner, under license, or as permitted by law.

This publication was correct at the time of going to print, however Avery Weigh-Tronix reserves the right to alter without notice the specification, design, price or conditions of supply of any product or service at any time.

Table of Contents

	<i>page</i>
Table of Contents	3
Chapter 1 Introduction and Installation	4
System requirements	4
Start Up	4
Licensing	4
Chapter 2 Setup and Operation	6
PLU Lite Ethernet setup	6
ZK830 Ethernet setup	7
PLU Serial setup	8
ZK830 Serial setup	8
Operation	9
Connect/Disconnect button	9
Adding a PLU	10
Using the 'Search by' function	11
Activating a PLU	11
Get Live Piece Weight	11
Print	11
Menus	11
FILE	11
SETUP	11
HELP	12
Scanner Setup	12
Printer Setup	14
Print Format Setup	15
Print Tokens Setup	16

1 Introduction and Installation

This manual covers the installation and use of the PLU Lite software for communication and database management between your ZK830 and a PC. PLU Lite will provide basic Product Look Up (PLU) creation, maintenance, and archiving for the ZK830 database. The editor allows a user to add, subtract and save PLU information while you are not connected to the scale.

PLU lite allows you to automatically activate PLU's by using a scanner attached to the PC or by manually pressing a button to select the currently selected PLU.

1.1 System requirements

Windows 7, Windows 8 or Windows 10

One ZK830 only can operate with this software package via RS232 or Ethernet

Optional USB barcode scanner to connect through PC

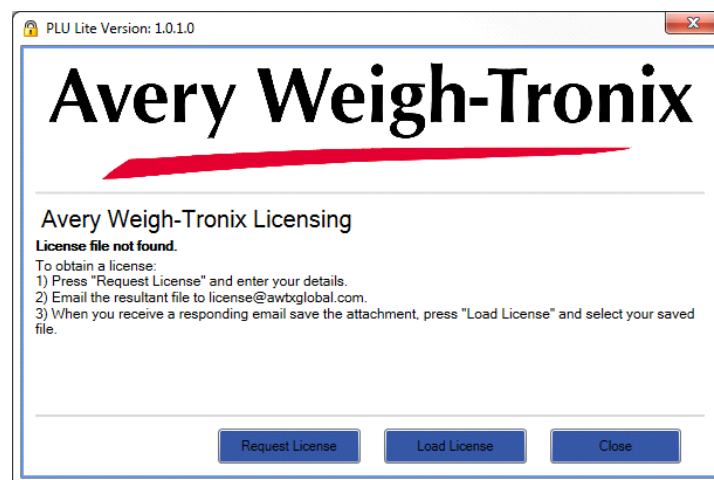
The ZK830 firmware version must be at least 1.0.3.0 or greater

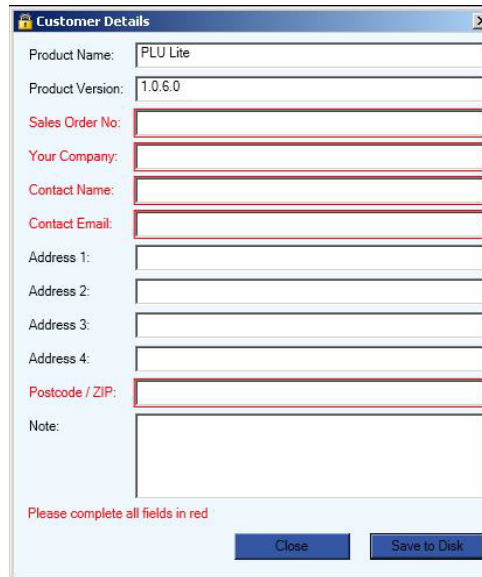
1.2 Start Up

When the PLU Lite application is installed and first powered up, there will be no license found. The user will need to follow the onscreen instructions to request a license from Avery Weigh-Tronix. This license will lock the application to the PC on which the application is installed.

1.3 Licensing

After installation, when the product is run for the first time the following license screen will be shown:





The image shows a 'Customer Details' dialog box with the following fields:

- Product Name:
- Product Version:
- Sales Order No:
- Your Company:
- Contact Name:
- Contact Email:
- Address 1:
- Address 2:
- Address 3:
- Address 4:
- Postcode / ZIP:
- Note:

At the bottom, there is a red text prompt: "Please complete all fields in red". Below this are two buttons: "Close" and "Save to Disk".

Once completed filling in all the required fields, press **Save to disk** and save the [LicenseInformation.xml file](#) to the file system. Make sure you know where the file is stored as you will need to send that file to Avery Weigh-Tronix.

Email the file to license@awtxglobal.com

When you receive a license file back from Avery Weigh-Tronix press **Load License** and select the file from the local file system. If the email was sent to a different PC you must manually transfer the file between PCs. If the license file is correct, the PLU Lite program will then start automatically and you should not be prompted for a license file again.

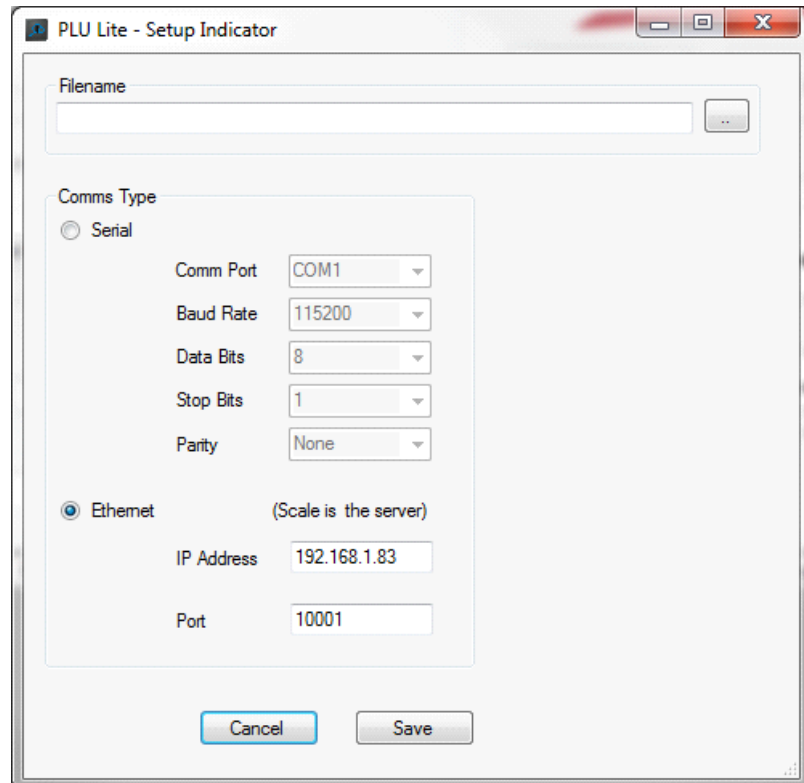
Press **Close** to close the program.

2 Setup and Operation

PLU Lite allows Ethernet or Serial interfaces to be used with the ZK830. Depending on your application, the following ZK830 settings will need to be setup.

2.1 PLU Lite Ethernet setup

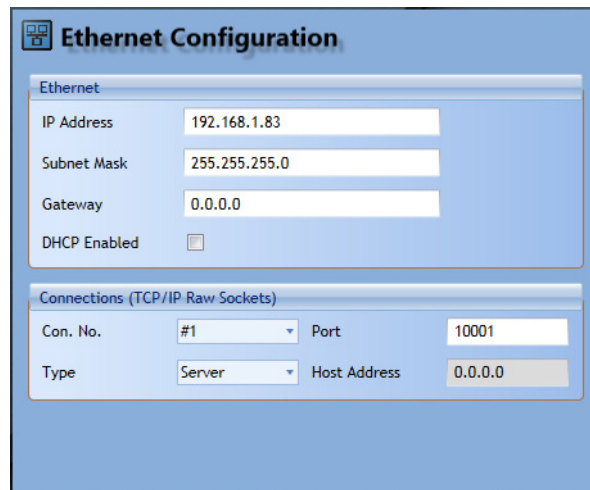
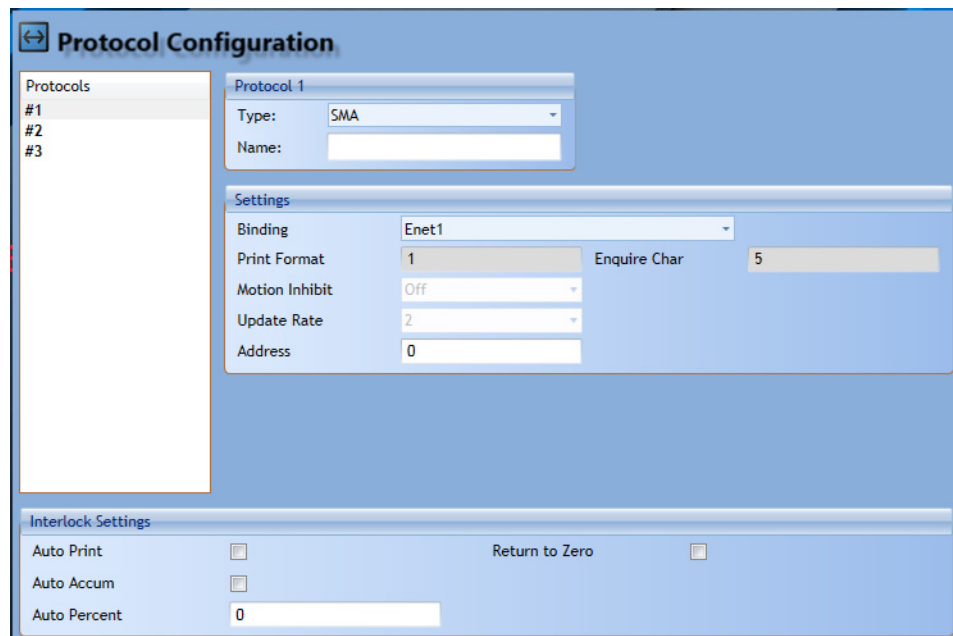
This screen is the first that appears after licensing the software. The **Setup** menu allows you to configure the filename and the communications settings.



The filename field will be non-editable when an active data filename has been selected.

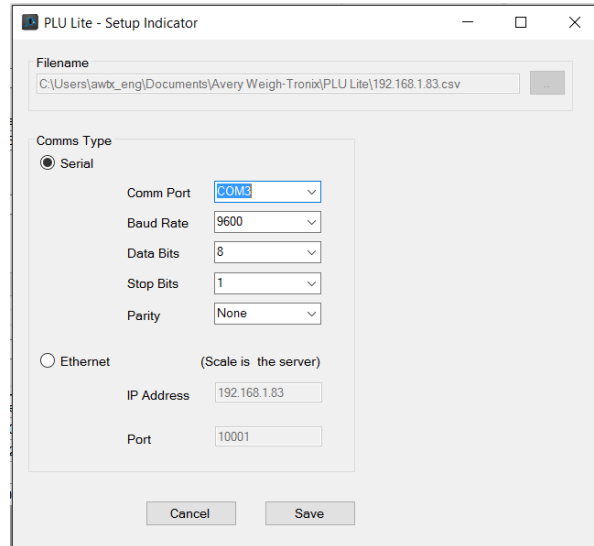
2.2 ZK830 Ethernet setup

Below are example Ztools screenshots you use to configure the indicator's Ethernet settings.

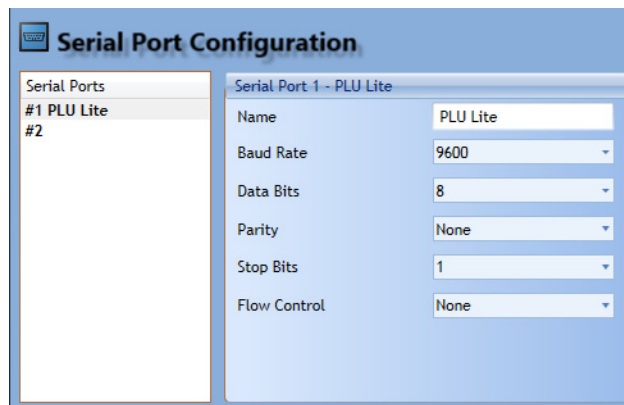
The ZK830 must be configured for SMA protocol on the connected port.

2.3 PLU Serial setup

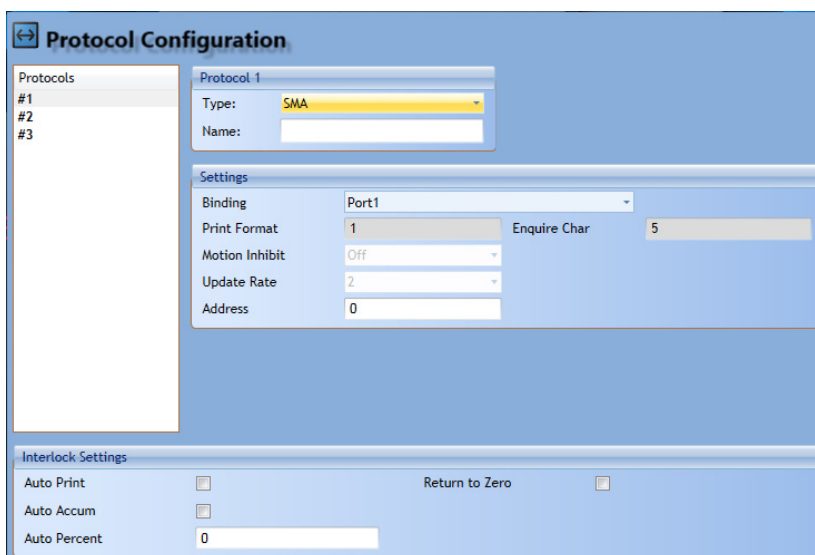


The 'PLU Lite - Setup Indicator' dialog box is shown. It has a 'Filename' field with the path 'C:\Users\awbx_engl\Documents\Avery Weigh-Tronix\PLU Lite\192.168.1.83.csv'. Under 'Comms Type', the 'Serial' radio button is selected. The 'Comm Port' is set to 'COM3', 'Baud Rate' to '9600', 'Data Bits' to '8', 'Stop Bits' to '1', and 'Parity' to 'None'. The 'Ethernet' radio button is unselected, with a note '(Scale is the server)'. Below it, the 'IP Address' is '192.168.1.83' and the 'Port' is '10001'. 'Cancel' and 'Save' buttons are at the bottom.

2.4 ZK830 Serial setup



The 'Serial Port Configuration' window shows a list of 'Serial Ports' on the left with '#1 PLU Lite' and '#2'. The main area is titled 'Serial Port 1 - PLU Lite' and contains settings: 'Name' (PLU Lite), 'Baud Rate' (9600), 'Data Bits' (8), 'Parity' (None), 'Stop Bits' (1), and 'Flow Control' (None).



The 'Protocol Configuration' window shows a list of 'Protocols' on the left with '#1', '#2', and '#3'. The main area is titled 'Protocol 1' and contains settings: 'Type' (SMA), 'Name' (empty), and a 'Settings' section. The 'Settings' section includes 'Binding' (Port1), 'Print Format' (1), 'Enquire Char' (5), 'Motion Inhibit' (Off), 'Update Rate' (2), and 'Address' (0). At the bottom, there is an 'Interlock Settings' section with 'Auto Print' (checkbox), 'Auto Accum' (checkbox), 'Auto Percent' (0), and 'Return to Zero' (checkbox).

The ZK830 must be configured for SMA protocol on the connected port.

2.5 Operation

This is the main screen of the PLU Lite software:

Description	Part Number	PieceWeight	Tare Local	Tare Remote	LowCountLimit	HighCountLimit	Units
Can hold 32 alpha-numeric digit	QWERTY-abc123	0.002	0.0	0.0	0	0	lb
fully flexible wdgkit	up to 20-digits	0.005	0.0	0.0	0	0	lb
Glass seal 1" dia number 8 kit	AXT85-009777	0.00234	0.0	0.0	99	101	lb
Washer M8 Stainless	W1000298-ABX	0.000881	0.0	0.0	1000	1010	lb
Screw socket M16 x 20mm long	U50110	0.002	0.0	0.0	5000	5050	lb
Washer M6 Stainless	W8909870-ACX	0.000581	0.100098	0.0	1000	1010	lb
Screw socket M4 x 50mm long	U50092	0.01	0.0	0.0	5000	5050	lb
Screw socket M5 x 10mm long	U50100	0.0001	0.0	0.0	0	0	lb
Washer M10	W8908760-ZDG	0.001008	0.001987	0.0	0	0	lb
Screw socket M10 x 100mm long	U60001	0.4	0.0	0.0	0	0	lb
...

Live piece weights can be read from the indicator and saved in the database in real time. If you have an active PLU displayed in the Database editor, press **Get live Piece Weight** to transfer the scales piece weight to the displayed PLU's Piece Weight value. Press the **Save** button to store the piece weight.

Press the **Print** button to print the live data from the indicator on a suitable printer once correctly configured and connected to the PC. The print data can be programmed via a single print format which is built up using flexible print tokens and free text.

2.5.1 Connect/Disconnect button

Once the ethernet or serial setup configurations are complete, see sections 2.1 through 2.4, you need to connect the software to the scale by pressing the **Connect** button. The button will change to a **Disconnect** button. Use this to disconnect the scale from the software, if necessary.

2.5.2 Adding a PLU

After the file has been created and a ZK830 system has been configured, select the **NEW** button on the database screen to create a new PLU number.

The screenshot shows a 'Database' window with the following fields and values:

Field	Value
Part Number	AWT05-XXXX
Description	SREWS
Low Count Limit	0
Piece Weight (lb)	0.0035958340
High Count Limit	0
Tare Local (lb)	99999
Tare Remote (lb)	99999
Units	lb

At the bottom of the window are five buttons: New, Copy, Delete, Save, and Cancel.



The default tare value of 99999 disables the tare for the current product and when activated uses the tare of the previous product.



*After you have validated that Part number, Description, Unit, Local scale and Remote scale tares have been entered properly, select the **Save** key.*

A part number can also be added by scanning its barcode. If the part number already exists it will automatically be activated but, if it's a new part number, the option of creating a new record in the database will be given. See the window below. Add the details as described above, then press **Save**.

The screenshot shows a 'PLU Lite' dialog box with the following text:

Scanned Part Number 041107001200 not found. Would you like to create it ?

At the bottom of the dialog box are two buttons: Yes and No.

2.5.3 Using the 'Search by' function

Once PLUs are created, you can search for a particular PLU by Part Number or Description. Use the **Search by** function on the main screen. First, select if you want to search by Part Number or Description then begin to type in a Part Number or Description. The database will show any entries that match your search requirements.



*You can put the cursor in the **Search by** box and use the scanner to scan in a part number or description to speed up your search.*

2.5.4 Activating a PLU

Scan the barcode of the required part to activate a PLU on the indicator, or press the **Activate PLU** button once you have selected the part from the main view.

2.5.5 Get Live Piece Weight

Once a PLU is active, press the **Get Live piece weight** button to read the piece weight from the scale and put it in the currently selected PLU's value. You can then elect to Save or Cancel the PLU.

2.5.6 Print

Once a PLU has been activated pressing the **Print** key will send the programmed text to the configured printer or to the screen depending on the printer setup.'

2.6 Menus

2.6.1 FILE

The following menu items can be found under the **File** command:

- | | |
|----------------|--|
| New | Allows you to create a new database. |
| Open | Allows you to Open an existing CSV file. |
| Save | Saves the current configuration and data to the hard drive of the PC |
| Save As | Allows you to save the Database's PLU data as a CSV file. |
| Exit | Terminates the application |

2.6.2 SETUP

The following menu items can be found under the **Setup** command:

- | | |
|------------------|--|
| Indicator | Allows you to view or change the settings like IP address, com port of the PC, etc.. |
|------------------|--|

- Scanner

Allows you to view or change the scanner settings
- Printer

Allows you to view or change the printer settings
- Print Format

Allows you to program a single print format to be printed when the Print button is pressed
- Print Tokens

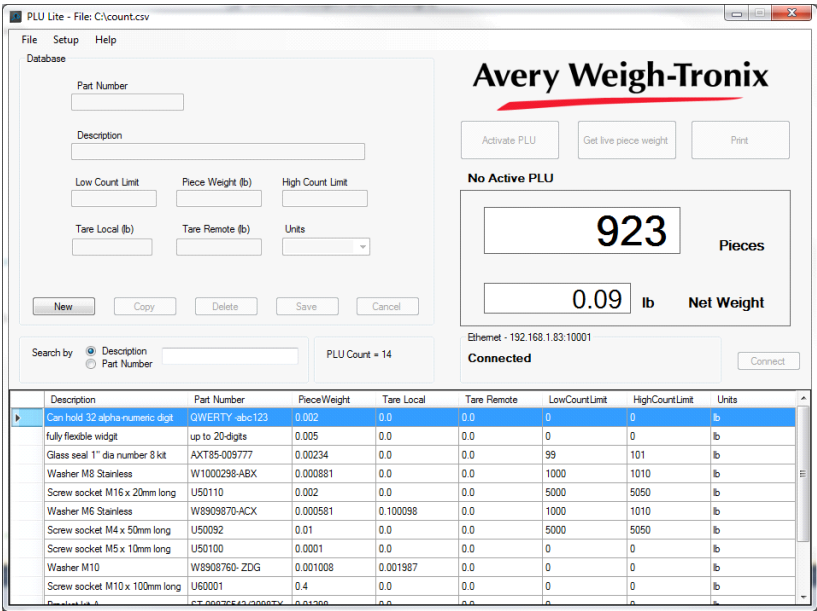
Allows you to change the print tokens used by the print format

2.6.3 HELP

- About

Lists the version and End User License Agreement information about the application.

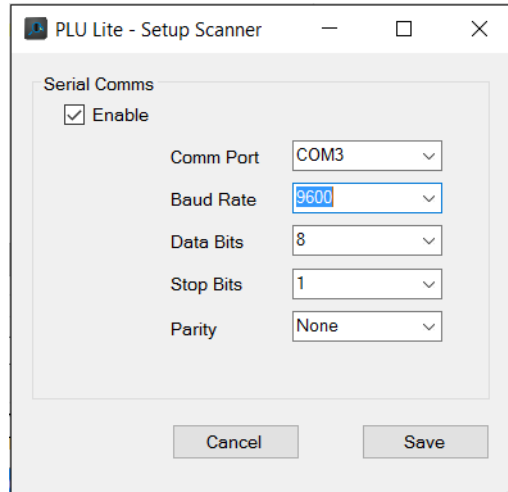
The Screen will look similar to below once you have saved at least 1 PLU:



2.7 Scanner Setup

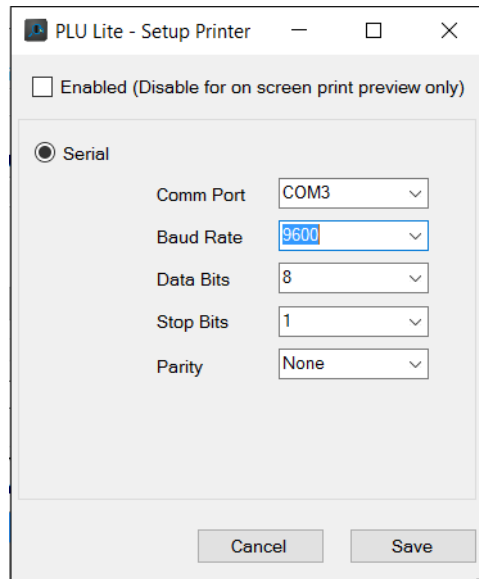
The Scanner Setup menu allows you to configure the serial parameters for the scanner.

The scanner output format is the **Part Number** followed by a CR



2.8 Printer Setup

The Printer Setup menu allows you to configure the printer. If the **Enabled** box is unticked, a preview is displayed on the screen. See below.



PLU Lite - Setup Printer

☐ Enabled (Disable for on screen print preview only)

☒ Serial

Comm Port: COM3

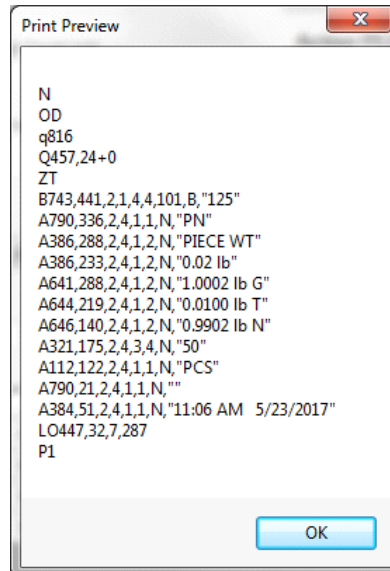
Baud Rate: 9600

Data Bits: 8

Stop Bits: 1

Parity: None

Cancel Save



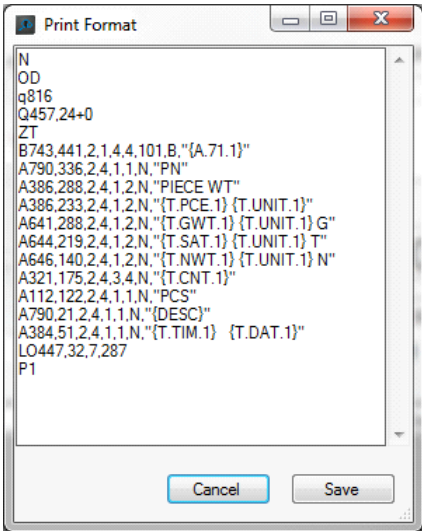
Print Preview

N
OD
q816
Q457,24+0
ZT
B743,441,2,1,4,4,101,B,"125"
A790,336,2,4,1,1,N,"PN"
A386,288,2,4,1,2,N,"PIECE WT"
A386,233,2,4,1,2,N,"0.02 lb"
A641,288,2,4,1,2,N,"1.0002 lb G"
A644,219,2,4,1,2,N,"0.0100 lb T"
A646,140,2,4,1,2,N,"0.9902 lb N"
A321,175,2,4,3,4,N,"50"
A112,122,2,4,1,1,N,"PCS"
A790,21,2,4,1,1,N,""
A384,51,2,4,1,1,N,"11:06 AM 5/23/2017"
LO447,32,7,287
P1

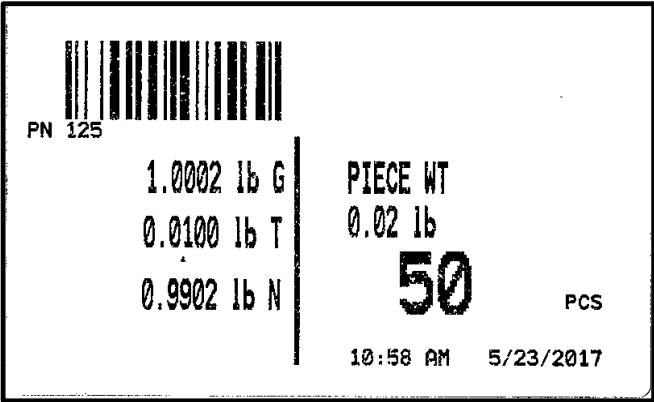
OK

2.9 Print Format Setup

The Print Format Setup menu allows you to program the print format. The example below is for a Zebra GX420t printer.

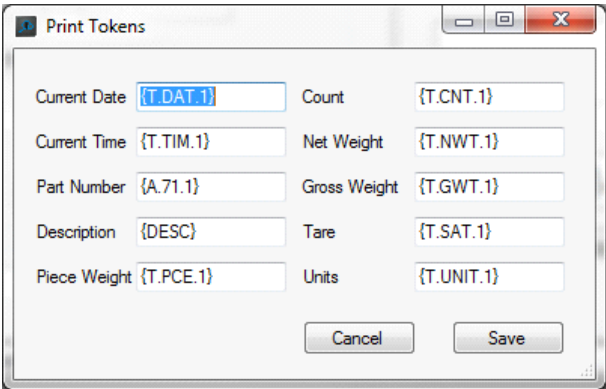


An example label is shown below.



2.10 Print Tokens Setup

The Print tokens setup allows you to configure the print token names that can be used in the print format. The defaults are shown below.



The image shows a 'Print Tokens' dialog box with a title bar containing a close button. The dialog contains two columns of text input fields. The left column labels are 'Current Date', 'Current Time', 'Part Number', 'Description', and 'Piece Weight'. The right column labels are 'Count', 'Net Weight', 'Gross Weight', 'Tare', and 'Units'. Each label is followed by a text box containing a default token value. At the bottom right are 'Cancel' and 'Save' buttons.

Field	Default Value
Current Date	{T.DAT.1}
Current Time	{T.TIM.1}
Part Number	{A.71.1}
Description	{DESC}
Piece Weight	{T.PCE.1}
Count	{T.CNT.1}
Net Weight	{T.NWT.1}
Gross Weight	{T.GWT.1}
Tare	{T.SAT.1}
Units	{T.UNIT.1}

Avery Weigh-Tronix

**Avery Weigh-Tronix USA**

1000 Armstrong Dr.

Fairmont MN 56031 USA

Tel: 507-238-4461

Fax: 507-238-4195

Email: usinfo@awtxglobal.com

www.averyweigh-tronix.com

Avery Weigh-Tronix UK

Foundry Lane,

Smethwick, West Midlands,

England B66 2LP

Tel: +44 (0) 8453 66 77 88

Fax: +44 (0) 121 224 8183

Email: info@awtxglobal.com

www.averyweigh-tronix.com