

Model 4123 Series Portable PC User Manual

DECEMBER 2018

Includes Models:

- 4123:** Carbon Fiber, Intel Core i7, 128GB Slim Sata, 16GB RAM, Battery B/U
- 4123AC:** Cast Aluminum, Intel Core i7, 256GB 2.5" SSD, 16GB RAM, WiFi
- 4123AD:** Cast Aluminum, Intel Atom, 128GB Slim Sata, 8GB RAM, Wi-Fi
- 4123AE:** Cast Aluminum, Intel Core i7, 256GB 2.5" SSD, 16GB RAM
- 4123AF:** Machined Aluminum, Intel Core i7, 128GB Slim Sata, 16GB RAM, Wi-Fi





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FCC WARNING

Computing devices and peripherals manufactured by Daisy Data Displays generate, use, and can radiate radio frequency energy, and if not installed and used in accordance with the instructions in this manual may cause interference to radio communications. Such equipment has been tested and found to comply with the limits for a Class A computing device pursuant to Subpart J of Part 15 of the FCC Rules, which are designed to provide reasonable protection against radio interference when operated in a commercial environment. Operation of this equipment in a residential area is likely to cause interference, in which case the user - at his own expense - will be required to take whatever measures may be required to correct the interference.

Some components may not have been manufactured by Daisy Data Displays, Inc. If not, Daisy has been advised by the manufacturer of the component that the component has been tested and complies with the Class A computing device limits as described above.

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Manual: D004-000017
December 2018
Initial Release





LIMITED WARRANTY AND LIABILITY STATEMENT

To the original purchaser, Daisy Data Displays, Inc., hereinafter referred to collectively as SELLER, warrants each of its manufactured products, and all components therein contained to be free from defects in materials and/or workmanship for a period of 12 months from the date of purchase.

Should a malfunction or other indication of defect attributable directly to faulty materials and/or workmanship occur, Seller will, at its option, and without charge to the customer for labor and parts, repair or replace the defective product, F.O.B. Seller's plant, but Seller will not be responsible for freight from Purchaser to Seller's plant. In no event shall Seller be liable for any loss, inconvenience or damage, whether direct, incidental, consequential or otherwise resulting from abuse, misapplication or modification of the product, improper or faulty power, damage resulting from repairs or alterations performed by unauthorized persons, or conditions resulting from any other equipment attached to the product.

Seller assumes no liability for damage occurring in transit due to the product not being returned in its original shipping material.

This warranty is exclusive and is in lieu of any warranty of merchantability or fitness for a particular purpose or other warranty of quality whether expressed or implied, except of title and against patent infringement. Correction of nonconformities, in the manner and for the period of time provided above, shall constitute fulfillment of all liabilities of the Seller to the Purchaser with respect to, or arising out of the goods, whether based on contract, negligence, strict tort or otherwise.

LIMITATION OF LIABILITY

The Seller shall not under any circumstances be liable for special or consequential damages, such as, but not limited to, damage or loss of other property or equipment, loss of profits or revenues, cost of capital, cost of purchased or replacement goods, or claims of customers of Purchaser for service interruptions. The remedies of the Purchaser set forth herein are exclusive, and the liability of Seller respect to any contract, or anything done in connection therewith such as the performance or breach thereof, of from the manufacture, sale, delivery, resale, installation or use of any goods covered by or furnished under this contract whether arising out of contract, negligence, strict tort or breach of warranty or otherwise, shall not, except as expressly provided herein, exceed the price of the goods upon which such liability is based.

This warranty gives you specific legal rights, and you may also have other rights, which vary from state to state. Seller makes every effort to provide clear and accurate technical information on the application of its products in the Operator's Manual, and assumes no liability for misuse of the information.



TABLE OF CONTENTS

1.0 Introduction	1
1.1 Product Description.....	1
2.0 Customer Service	2
3.0 Software/Hardware	2
4.0 Unit Certifications	3
4.1 Model 4123 Special Conditon	3
5.0 Certificate of Compliance	4
6.0 Specifications	5
7.0 Models/Components	5
7.1 Base Model 4123 Series Configurations	5
7.2 Model 4123(xx) Critical Components	6
7.3 Glandplate Components	8
7.4 Model 4123(xx) Series Field Wiring Diagrams	9
7.4.1 Model 4123 Field Wiring Diagram	9
7.4.2 Model 4123AC Field Wiring Diagram.....	10
7.4.3 Model 4123AD Field Wiring Diagram.....	11
7.4.4 Model 4123AE Field Wiring Diagram.....	12
7.4.5 Model 4123AF Field Wiring Diagram	13
7.5 Model 4123(xx) Series Block Diagrams	14
7.5.1 Model 4123 Block Diagram	15
7.5.2 Model 4123AC Block Diagram	16
7.5.3 Model 4123AD Block Diagram	17
7.5.4 Model 4123AE Block Diagram	18
7.5.5 Model 4123AF Block Diagram	19
7.6 Model 4123(xx) Series Mechanical Drawings	20
7.6.1 Model 4123 Mechanical Drawings	20
7.6.2 Model 4123AC Mechanical Drawings	22
7.6.3 Model 4123AD Mechanical Drawings	24
7.6.4 Model 4123AE Mechanical Drawings	26
7.6.5 Model 4123AF Mechanical Drawings	28
8.0 Supply Power Connection (100-240VAC)	30
8.1 Bayonet-style Quick Connect/disconnect Power Connection	30
8.1.1 Connecting KPT/KPSE Bayonet-style Quick Connect.....	31
8.2 Sealcon Cord Grip/Internal Power Connection	31
8.2.1 Installing Internally Connected Power Source Cable.....	32
9.0 Keypad Layout	35
10.0 Installation and Warnings	36
11.0 Battery Storage and Operation (Model 4123)	36
12.0 Repair, Maintenance and Warnings	36
12.1 Repairs	36
12.2 Maintenance.....	37
13.0 4123(xx) General Trouble Shooting	38
14.0 Revisions	39



1.0 Introduction

This manual will detail the the Model 4123 Series Portable PC manufactured by Daisy Data Display, Inc.

1.1 Product Description

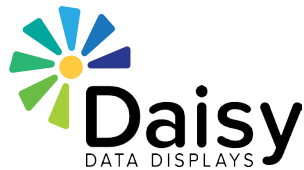
The Model 4123 Series Portable PC is a mobile HMI PC certified for a Zone 2 (Information Technology) environment. The highly durable, sleek mobile design of the Model 4123 allows for the unit to be used in a variety of locations.

While adhering to the stringent design parameters to meet the Zone 2 hazardous location rating, Daisy Data Displays has engineered the core functionality of the Model 4123 around five (5) base model configurations, with options. This flexibility makes the Model 4123 suitable for a variety of applications that include: Oil and Gas Industry, the military, pharmaceutical and food processing.



**Model 4123 Series
Portable PC**

For more information contact



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2.0 Customer Service

All Daisy systems pass detailed quality control configuration and inspection before being shipped. Daisy strives to create the highest quality systems, and chooses top quality parts. However, like most electronic devices, units may experience issues over time. Should you experience problems, or have any further inquiries or comments, please contact Daisy's customer service department:

-  Business Phone: (717) 932-9999 x222
-  Fax: (717) 932-8000
-  Email: support@daisydata.com

Equipment returned to Daisy for service must be accompanied by a valid return merchandise authorization (RMA) number. Items or products shipped to Daisy without a valid RMA number will be refused. An RMA will be generated upon receipt of Company Name, Address, Contact, Product Model and Serial Numbers.



Figure 1 — Daisy Data Product ID Tag

Daisy Data Displays Inc. prides itself on offering best in class support for your products. Our technical support team can help you with installation, configuration, troubleshooting, and other support issues for all Daisy's products.

3.0 Software/Hardware

Daisy data should be contacted for any hardware or software questions/issues. Additional SSD's or operating systems can be supplied as needed. Be aware that any modifications or alterations without the assistance of Daisy Data could affect unit certifications and implied warranty.

!! IMPORTANT NOTE ON ORDERING REPLACEMENT PARTS !!

All Daisy Data Display products undergo continual improvement to ensure they meet the myriad of regulatory standards and codes for equipment operating in hazardous environments. These improvements or modifications may effect Daisy Data products already in the field.

With that in mind, as a customer servicing your own product, it is highly recommended that you contact your Daisy Data Display customer service representative to confirm any part or part number you may be looking to replace. Your Daisy representative will ensure you are getting the correct part, or the possible availability of a suitable replacement part to ensure your equipment continues to meet the standards and/or codes originally intended.





4.0 Unit Certifications

The 4123 Series Portable PCs are third-party certified for ATEX Zone 2 locations as detailed below.



Figure 2 — Typical Model 4123 / Product Certification ID

Table 1 — Product Rating Description

Symbol/Rating	Description
	European Conformity Manufactured according to applicable EU Directives
	Special Marking signifying equipment used in explosive atmospheres
II	Equipment Group (Gas/Dust)
3	Equipment Category (Normal Protection)
G	Hazardous Atmospheres (Gas, Vapour, Mist)
Ex	European Hazardous Location Standard Certified
nA	Non-incendive
IIC	Gas Group
T4	Temperature Class (T4=135°C max)
Gc	Zone 2 Protection Methods
0°C <Ta <+40°C	Model 4123 (Only)
-20°C <Ta <+55°C	Models 4123AC, 4123AD, 4123AE, 4123AF
	Operating Temperature Range

4.1 Model 4123 Special Condition

Due to the front enclosure on the Model 4123 Portable PC having a carbon fiber faceplate, a Daisy Data Option 821 (Sun Visor) needs to be installed if exposure to ultraviolet light is anticipated. This Sun Visor (Option 821) Special Condition is specifically for the Model 4123 to meet the Resistance to Light, EN-IEC 60079-0 (clause 7.3) requirement.

When a Model 4123 utilizes the Option 821 Sun Visor in its construction to meet the Special Condition requirement, its product nameplate will denote this with an “X” marking preceding the rating nomenclature as shown below:

e.g. Ex nA T4 0°C < Ta < 40°C X

5.0 Certificate of Compliance



EC Declaration of Conformity

Date: Wednesday, November 21, 2018

Company Name: Daisy Data Displays, Inc.

Company Address: 2850 Lewisberry Road, York Haven, PA 17370

Model: 4123

Rating: Ex nA IIC T4 Gc 0°C<Ta<+40°C X

Models: 4123AC, 4123AD, 4123AE, 4123AF

Rating: Ex nA IIC T4 Gc -20°C<Ta<+55°C

The Daisy Data Displays Series 4123(xx) Portable PC fully complies with the following directives:

- EMC Directive 2014/30/EU
- Low Voltage Directive 2014/35/EU
- RoHS Directive 2011/65/EU
- ATEX Directive 2014/34/EU

The following EN/IEC standards were used to verify compliance:

- EN 55032:2012 (EN 61000-3-2, EN 61000-3-3)
- EN 55024:2010 (EN 61000-4-2, EN 61000-4-3, EN 61000-4-4, EN 61000-4-5, EN 61000-4-6, EN 61000-4-11)
- EN 60950-1:2006+A11(2009)+A12(2011)+A1(2010)+A2(2013)
- EN-IEC 60079-0:2017, EN-IEC 60079-1:2014, EN-IEC 60079-7:2017, EN-IEC 60079-15:2017
- IEC 60529 ed. 2.2 Dated 2013-08

According to information provided, our suppliers do not use in the manufacture of the components they supply us, hazardous substances as mentioned in the above RoHS Directive 2011/65/EU. We do not systematically analyze the supplied materials but require from our suppliers a certificate of compliance for raw materials. This declaration of conformity is used under the sole responsibility of the manufacturer.

David "Avi" Shefet
President
Daisy Data Displays, Inc.

Figure 3 — Certificate of Compliance



6.0 Specifications

Table 2 — Model 4123xx Technical Specifications

MATERIALS		
<i>All materials comply with IEC 60529 IP66 Standards</i>		
Enclosure and Hardware		
Model 4123	Carbon Fiber ¹ , 6061-T6 Aluminum	
Model 4123AC, 4123AD, 4123AE	A356.2 Cast Aluminum	
Model 4123AF	Machined Aluminum 6061-T6	
MECHANICAL		
See dimensional drawings - See Section 7.6 Model 4123(xx) Series Mechanical Drawings		
ENVIRONMENTAL		
Model 4123¹	Ingress Protection	IP66
	Operating Temperature (No Heater)	-0°C to 40°C
	Storage Temperature	-0°C to 40°C
	Relative Humidity	5% to 95%
Model 4123AC Model 4123AD Model 4123AE Model 4123AF	Ingress Protection	IP66
	Operating Temperature (No Heater)	-20°C to 55°C
	Storage Temperature	-20°C to 75°C
	Relative Humidity	5% to 95%
ELECTRICAL		
Voltage	100-240VAC 47-63Hz	
Current	1.8A	
AIR REQUIREMENTS		
Air Pressure	N/A	
DISPLAY		
Resolution (max)	1024x768	
Viewing Angle	80° x 80°	
Typical Brightness	600 nits	
Color Depth	24 bit	

7.0 Models/Components

The Model 4123 Series Portable PC is based upon five (5) unique base models incorporating a standard set of components/options for each model. In addition to the standard components/options, each model has a specific glandplate designed for it.

7.1 Base Model 4123 Series Configurations

The Model 4123 Series Portable PCs are designed around five (5) distinct models with a standard set of critical components. Each of these models are defined by specific base model configurations as shown in Table 3 below.

Table 3 — 4123(xx) – UL Listed, ATEX Zone 2 Certified Model Configurations

Model Number	Enclosure Material	Processor	Hard Drive	RAM	Misc.	Glandplate Assembly
4123	Carbon Fiber ¹	Intel Core i7-2610UE	128GB Slim SATA	16GB	Battery B/U	I640-002303
4123AC	Cast Alluminum	Intel Core i7-6600U	256GB SSD	16GB	WiFi	I640-002325
4123AD	Cast Alluminum	Intel Atom-E3845	128GB SSD	8GB	WiFi	I640-002322-01
4123AE	Cast Alluminum	Intel Core i7-6600U	256GB SSD	16GB	N/A	I640-002323
4123AF	Machined Alluminum	Intel Core i7-2610UE	128GB SSD	16GB	WiFi	I640-002325

¹ - Option 821 (Sun Visor) must be used to meet the Special Condition requirement to maintain ATEX Zone 2 Certification if the Model 4123 carbon fiber faceplate is exposed to ultra violent light.



7.2 Model 4123(xx) Critical Components

Each of the five (5) Model 4123 Series Portable PCs are constructed around a set of standard critical components. These components are shown in Table 4.

Table 4 — 4123(xx) UL Listed, ATEX Zone 2 Certified Critical Components

MODEL	PART NO.	DESCRIPTION
4123	P010-000101	110VAC Power Supply
	P310-005000	Motherboard – COM Express carrier board
	P000-000139	15" LCD Display
	P040-000080	15" Glass on Glass Resistive Touch Screen
	I301-010005	Nine Button Membrane
	I202-700011	Membrane Controller
	P040-100030	Touch Screen Controller (GoG Resistive)
	P050-200007	Intel i7 2nd gen module
	P062-120001	Storage (128GB Slim SATA)
	A314-318000	8GB DDR3 Memory (used with 2nd gen i7 module)
	E905-000017	14.4V Smart Battery
4123AC	P010-000101	110VAC Power Supply
	P310-005000	Motherboard – COM Express carrier board
	P000-000139	15" LCD Display
	P040-000098	15" Projected Capacitance Touch Screen
	I301-010005	Nine Button Membrane
	I202-700011	Membrane Controller
	P040-100048	Touch Screen Controller (PCAP)
	P050-210002	Intel i7 6th gen Module
	P060-000099	Storage (256GB 2.5" SSD)
	A314-418000	8GB DDR4 Memory (used with 6th gen i7 module)
	E907-000001	Antenna
P050-000286	Wireless Card	
4123AD	P010-000101	110VAC Power Supply
	P310-005000	Motherboard – COM Express carrier board
	P000-000139	15" LCD Display
	P040-000098	15" Projected Capacitance Touch Screen
	I301-010005	Nine Button Membrane
	I202-700011	Membrane Controller
	P040-100048	Touch Screen Controller (PCAP)
	P050-210000	Intel Atom E3845 Module
	P062-120001	Storage (128GB Slim SATA)
	A314-314003	8GB DDR3L Memory (used with Atom E3845 module)
	E907-000001	Antenna
P050-000286	Wireless Card	



Table 4 — 4123(xx) UL Listed, ATEX Zone 2 Certified Critical Components

MODEL	PART NO.	DESCRIPTION
4123AE	P010-000101	110VAC Power Supply
	P310-005000	Motherboard – COM Express carrier board
	P000-000139	15" LCD Display
	P040-000098	15" Projected Capacitance Touch Screen
	I301-010005	Nine Button Membrane
	I202-700011	Membrane Controller
	P040-100048	Touch Screen Controller (PCAP)
	P050-210002	Intel i7 6th gen Module
	P060-000099	Storage (256GB 2.5" SSD)
A314-418000	8GB DDR4 Memory (used with 6th gen i7 module)	
4123AF	P010-000101	110VAC Power Supply
	P310-005000	Motherboard – COM Express carrier board
	P000-000139	15" LCD Display
	P040-000098	15" Projected Capacitance Touch Screen
	I301-010005	Nine Button Membrane
	I202-700011	Membrane Controller
	P040-100048	Touch Screen Controller (PCAP)
	P050-200007	Intel i7 2nd gen module
	P062-120001	Storage (128GB Slim SATA)
	A314-318000	8GB DDR3 Memory (used with 2nd gen i7 module)
	E907-000001	Antenna
P050-000286	Wireless Card	

* *Shaded parts represent critical components common in ALL Model 4123 Series units*



7.3 Glandplate Components

Each 4123 Series Portable PC model is designed with specific user connections. These connections are penetrations through the enclosure that are specifically designed to seal the the internal components from any possible outside hazardous enviroment that could exist. Each model has a specific glandplate (1 of 4) designed for it as shown in Table 3. See Table 5 below for the connections assigned to each glandplate.

Table 5 — 4123(xx) – UL Listed, ATEX Zone 2 Certified Glandplate Configurations

Gland Assembly	Includes
I640-002303	Cord grip, 2 USB Ports, 1 RJ45 Port
I640-002322	Cord grip, 2 USB Ports, 1 RJ45 Port
I640-002323	Power Connector, 2 USB Ports, 2 RJ45 Ports
I640-002325	Power Connector, 2 Lemo Connectors, 2 USB Ports, 1 RJ45 Port

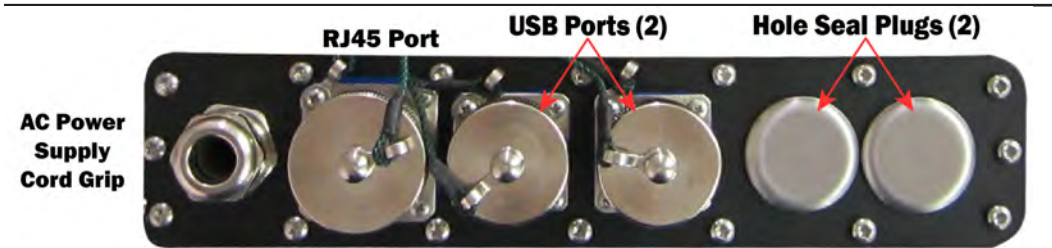


Figure 4 — I640-002303 Glandplate Configuration

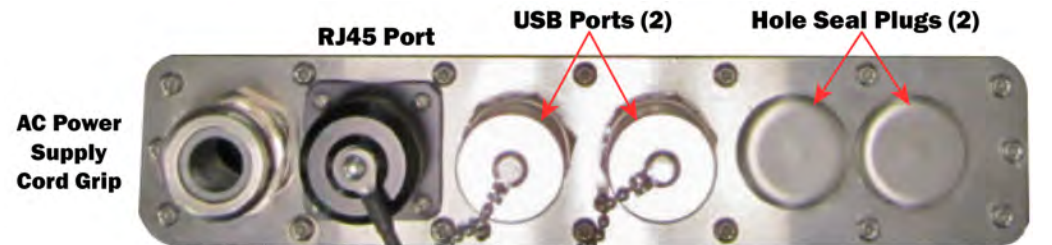


Figure 5 — I640-002322 Glandplate Configuration



Figure 6 — I640-002323 Glandplate Configuration



Figure 7 — I640-002325 Glandplate Configuration



7.4 Model 4123(xx) Series Field Wiring Diagrams

The Model 4123 Series gland plate provides all the receptacles for external connections. Each receptacle is a standard component provided to meet the hazardous location-rated connection the unit was designed for.

The customer is responsible obtaining and making all external connections. In addition, care must be taken when making the external connections to the Model 4123xx. The unit MUST be de-energized and/or the location rendered a non-hazardous area beforehand.



The following field wiring diagrams depict each gland plate and the external connection provided. These diagrams also show the customer-supplied connector required to make the connection and where they are to be located within the hazardous and non-hazardous area.

7.4.1 Model 4123 Field Wiring Diagram

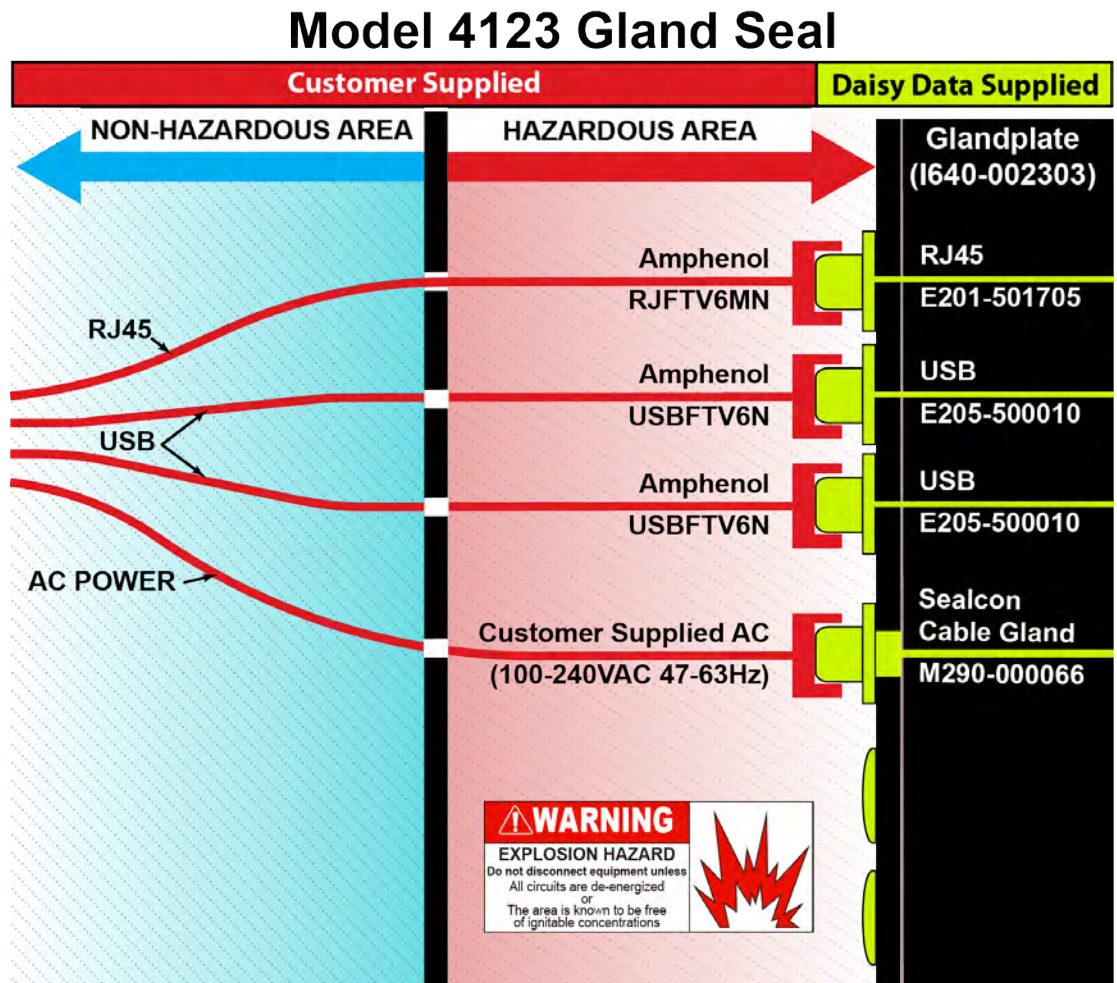


Figure 8 — Model 4123 Field Wiring Diagram



7.4.2 Model 4123AC Field Wiring Diagram

Model 4123AC Gland Seal

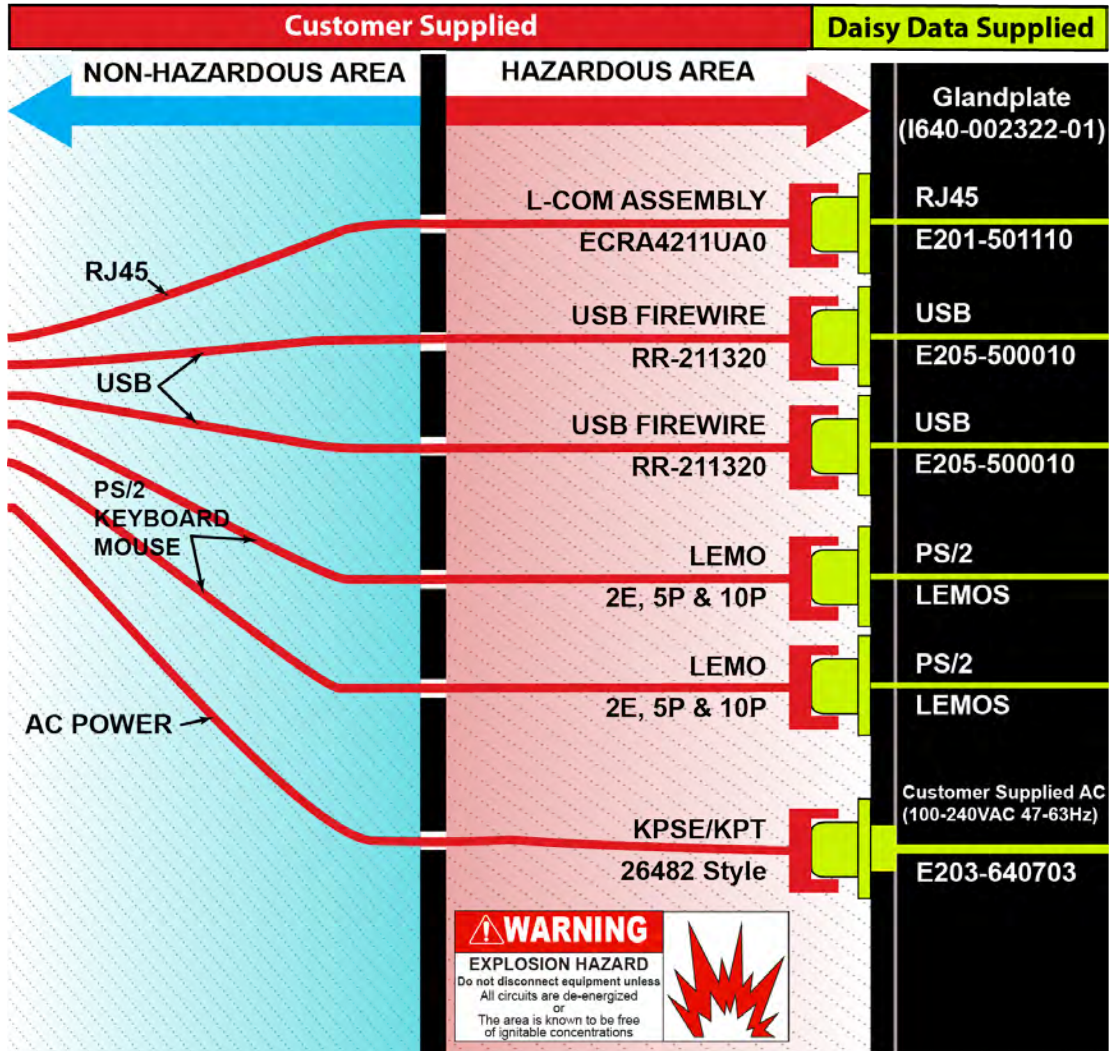


Figure 9 — Model 4123AC Field Wiring Diagram



7.4.3 Model 4123AD Field Wiring Diagram

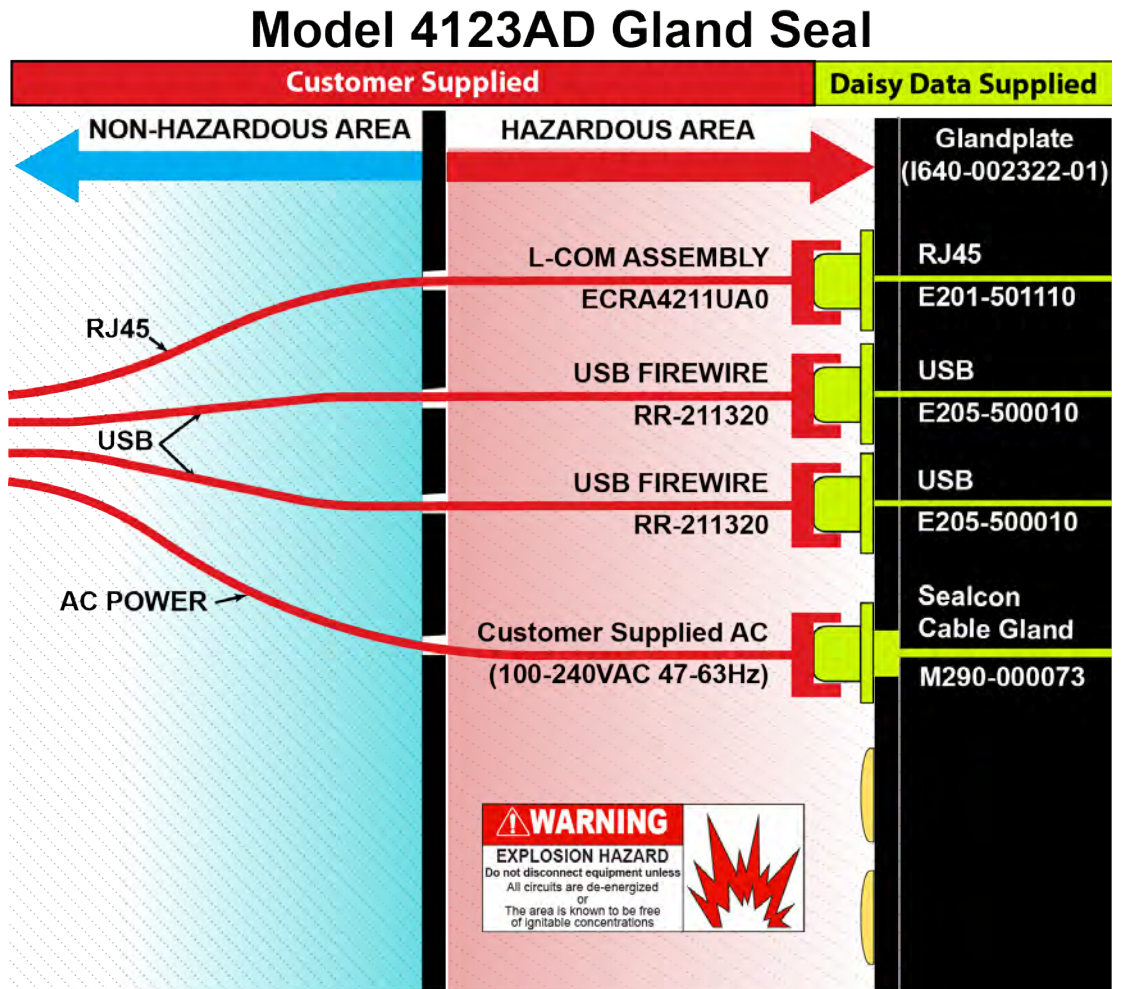


Figure 10 — Model 4123AD Field Wiring Diagram



7.4.4 Model 4123AE Field Wiring Diagram

Model 4123AE Gland Seal

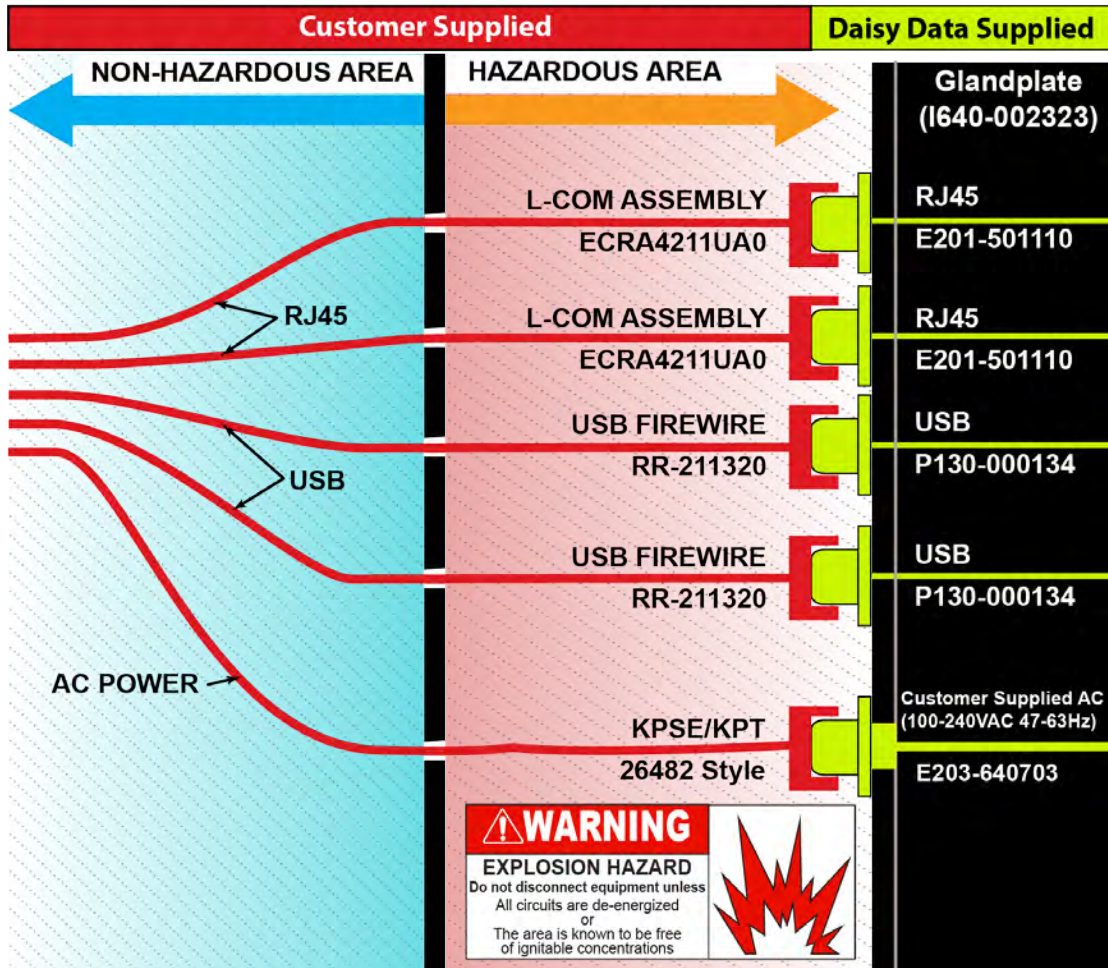


Figure 11 — Model 4123AE Field Wiring Diagram



7.4.5 Model 4123AF Field Wiring Diagram

Model 4123AF Gland Seal

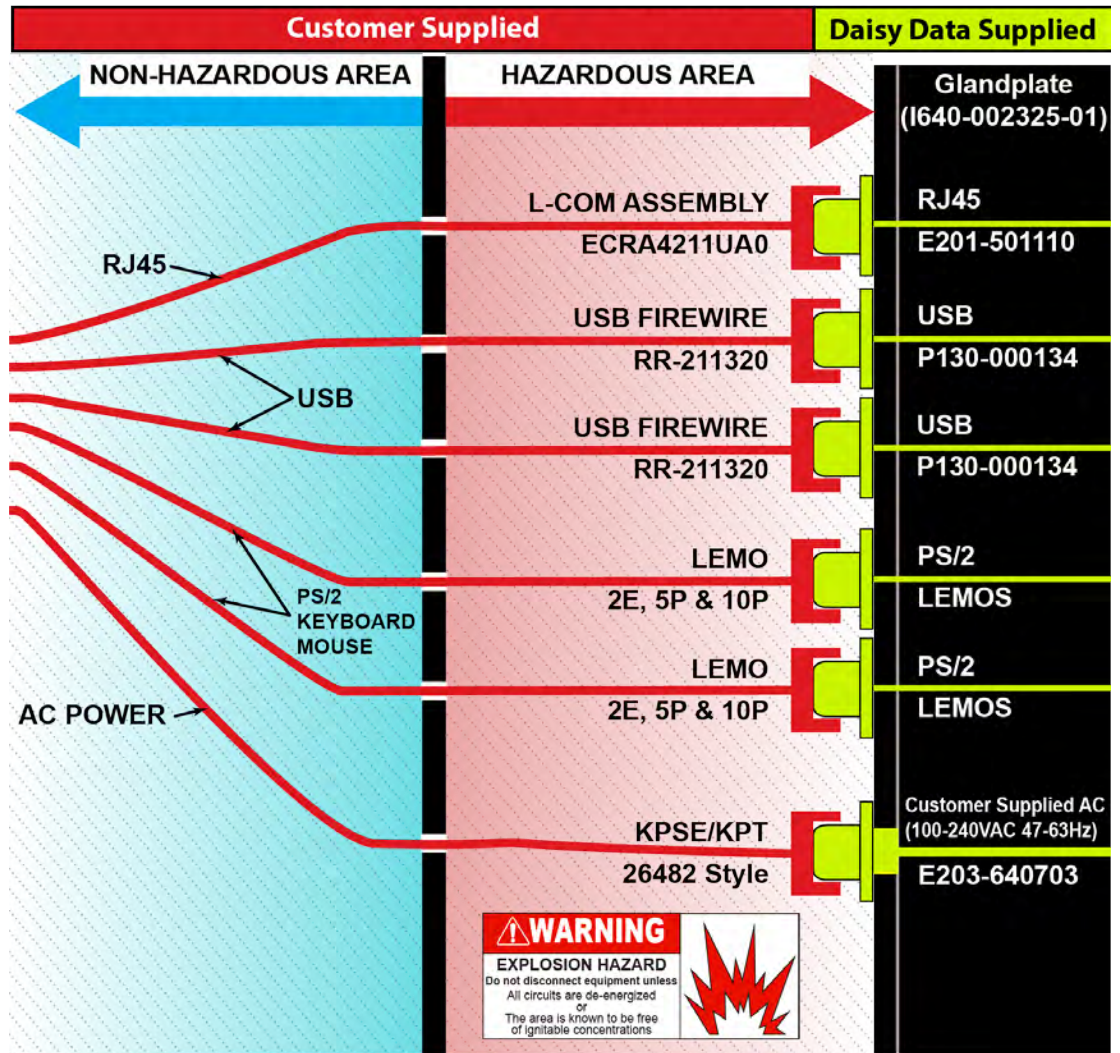


Figure 12 — Model 4123AF Field Wiring Diagram



7.5 Model 4123(xx) Series Block Diagrams

The Model 4123 Series Portable PC comes in five standardized configurations as described in “7.1 Base Model 4123 Series Configurations” on page 5. The following block diagrams detail each of the base models and the components contained in each.

- ✱ Model 4123 Block Diagram
- ✱ Model 4123AC Block Diagram
- ✱ Model 4123AD Block Diagram
- ✱ Model 4123AF Block Diagram
- ✱ Model 4123AF Block Diagram



Figure 13 — Model 4123 Series Portable PCs



7.5.1 Model 4123 Block Diagram

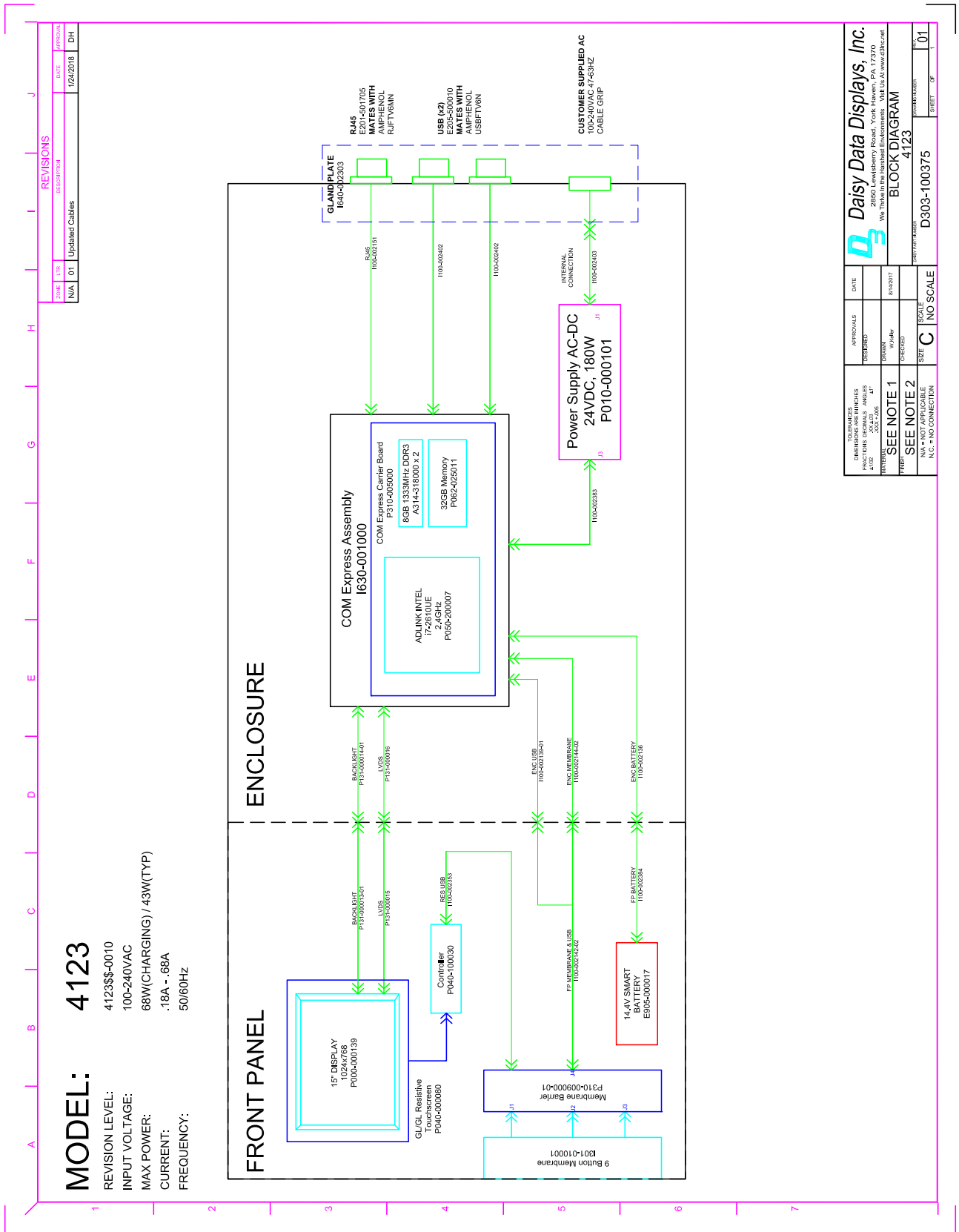


Figure 14 — Model 4123 Block Diagram



7.5.2 Model 4123AC Block Diagram

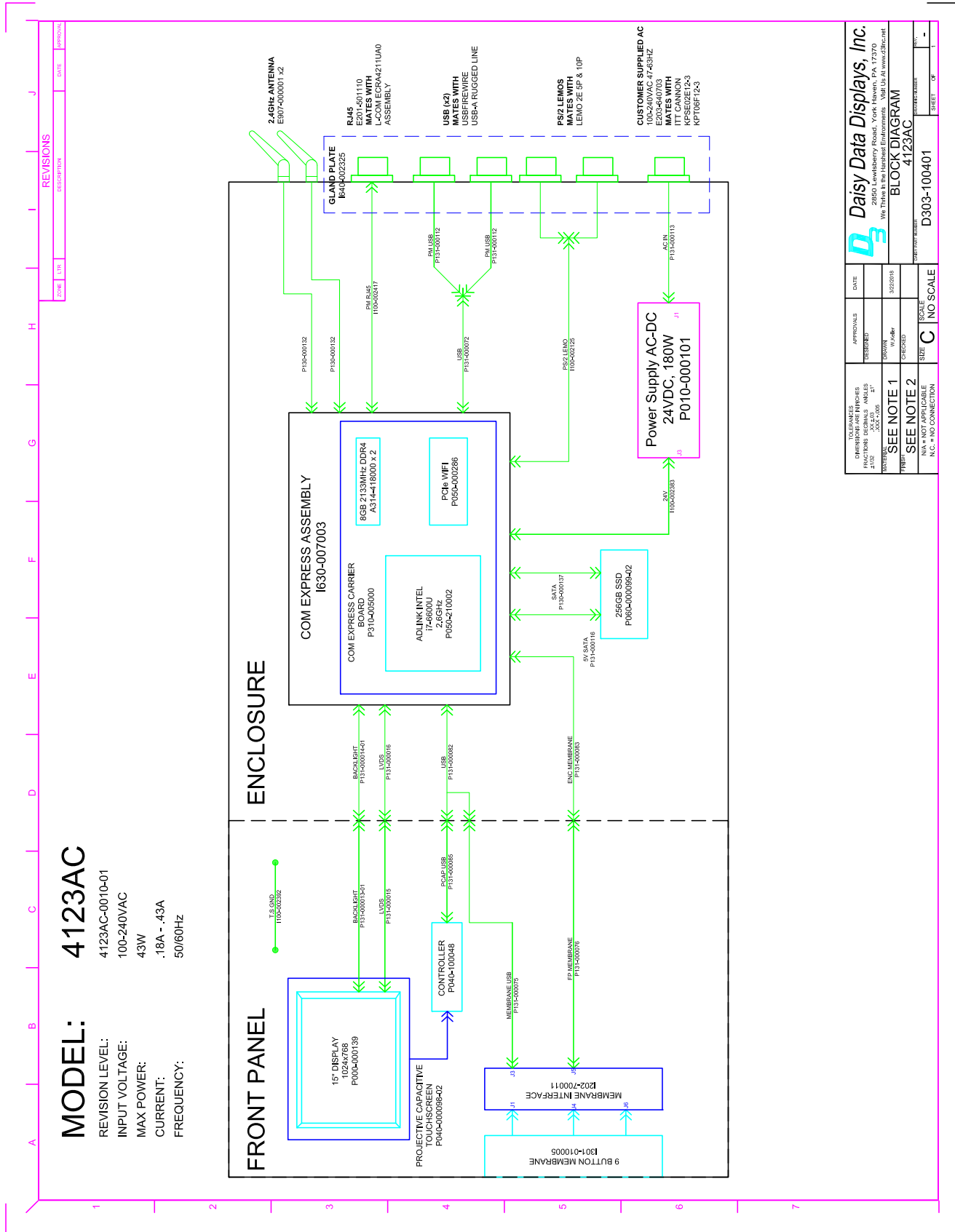


Figure 15 — Model 4123AC Block Diagram

TOLERANCES DIMENSIONS ARE IN INCHES UNLESS OTHERWISE SPECIFIED FRACTIONS: 1/16", 1/8", 3/16", 1/4", 3/8", 1/2" DECIMALS: .0005", .001", .002", .005", .010", .015", .030", .050", .100" ANGLES: 30°, 45°, 60°, 90°, 120°, 150°, 180° UNLESS SPECIFIED OTHERWISE		DATE	APPROVALS
SEE NOTE 1 UNLESS SPECIFIED OTHERWISE	DESIGNED DRAWN CHECKED DATE: 3/22/2016		
SEE NOTE 2 UNLESS SPECIFIED OTHERWISE N.C. = NO CONNECTION	CHECKED DATE: 3/22/2016	PART NUMBER 4123AC	SHEET OF
Daisy Data Displays, Inc. 2850 Levenshery Road, York Haven, PA 17370 We Thrive In the Harshiest Environments. Visit Us At www.daisy.com			BLOCK DIAGRAM 4123AC

7.5.3 Model 4123AD Block Diagram

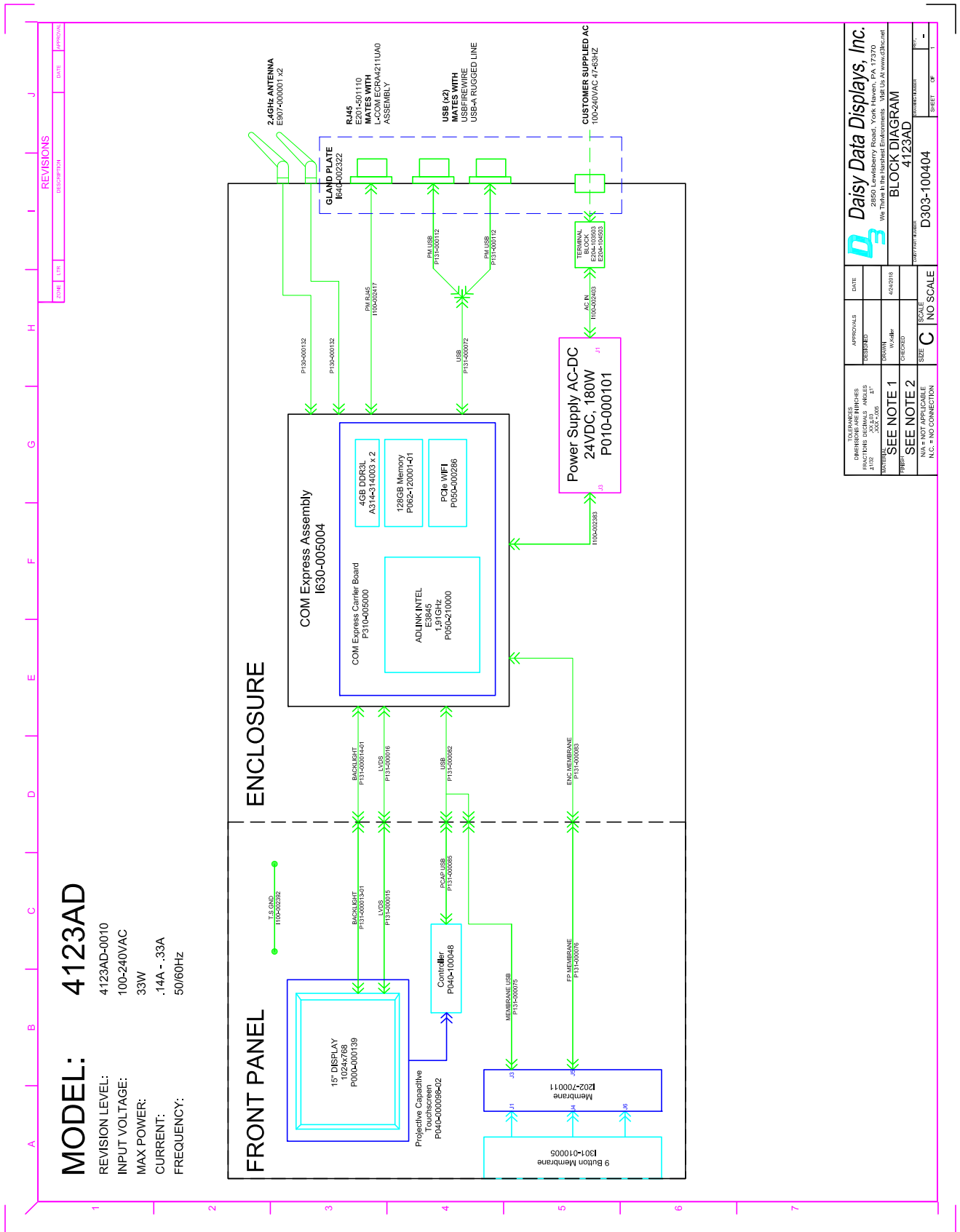


Figure 16 — Model 4123AD Block Diagram

TOLERANCES UNLESS OTHERWISE SPECIFIED ARE IN INCHES FRACTIONS .0005" DECIMALS .015"		DATE	APPROVALS
SEE NOTE 1	DESCRIPTION	DATE	DESIGNED
SEE NOTE 2	DISCREPANCY	4/24/2016	DRY
NO SCALE	CHECKED		TV/ARH
NO SCALE	SIZE	NO SCALE	
N.C. = NO CONNECTION			

Daisy Data Displays, Inc. 2850 Lewisberry Road, York Haven, PA 17370 We Think It's the Harsh Environment. VMT Us At www.d3inc.net	
BLOCK DIAGRAM	
4123AD	
PROJECT NUMBER	D3033-100404
SHEET	OF



7.5.5 Model 4123AF Block Diagram

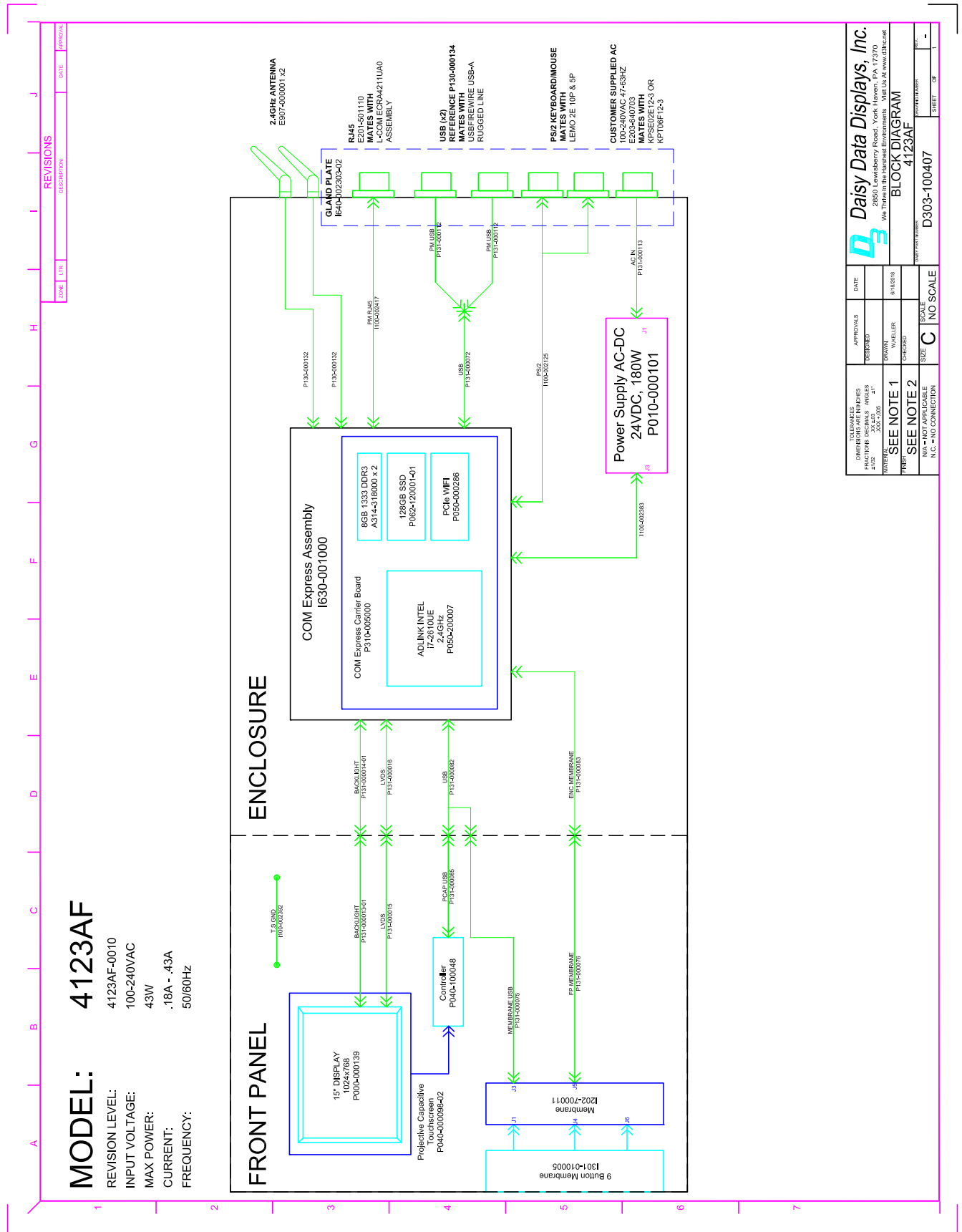


Figure 18 — Model 4123AF Block Diagram



7.6 Model 4123(xx) Series Mechanical Drawings

7.6.1 Model 4123 Mechanical Drawings

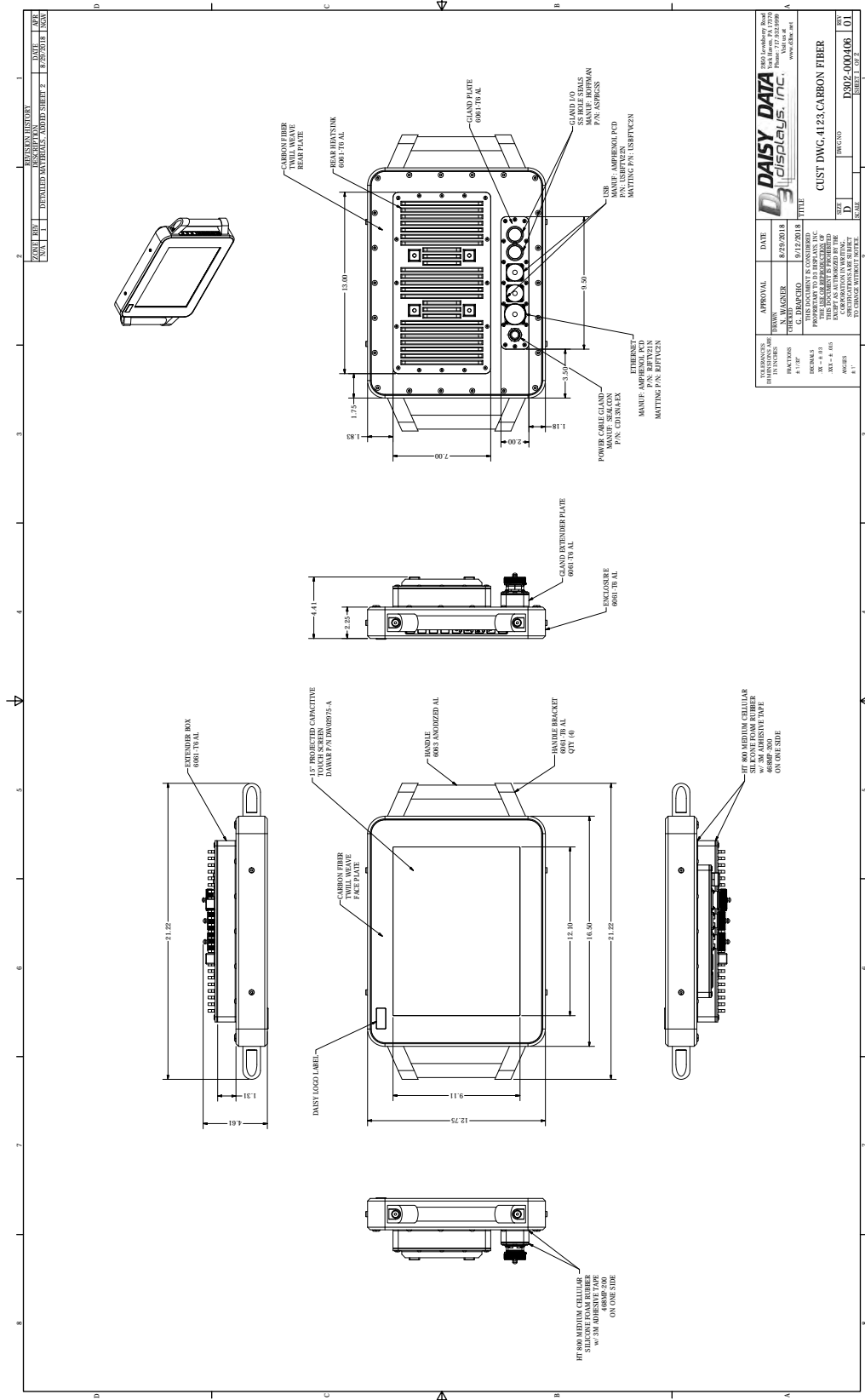


Figure 19 — Model 4123 Mechanical Drawing (1 of 2)



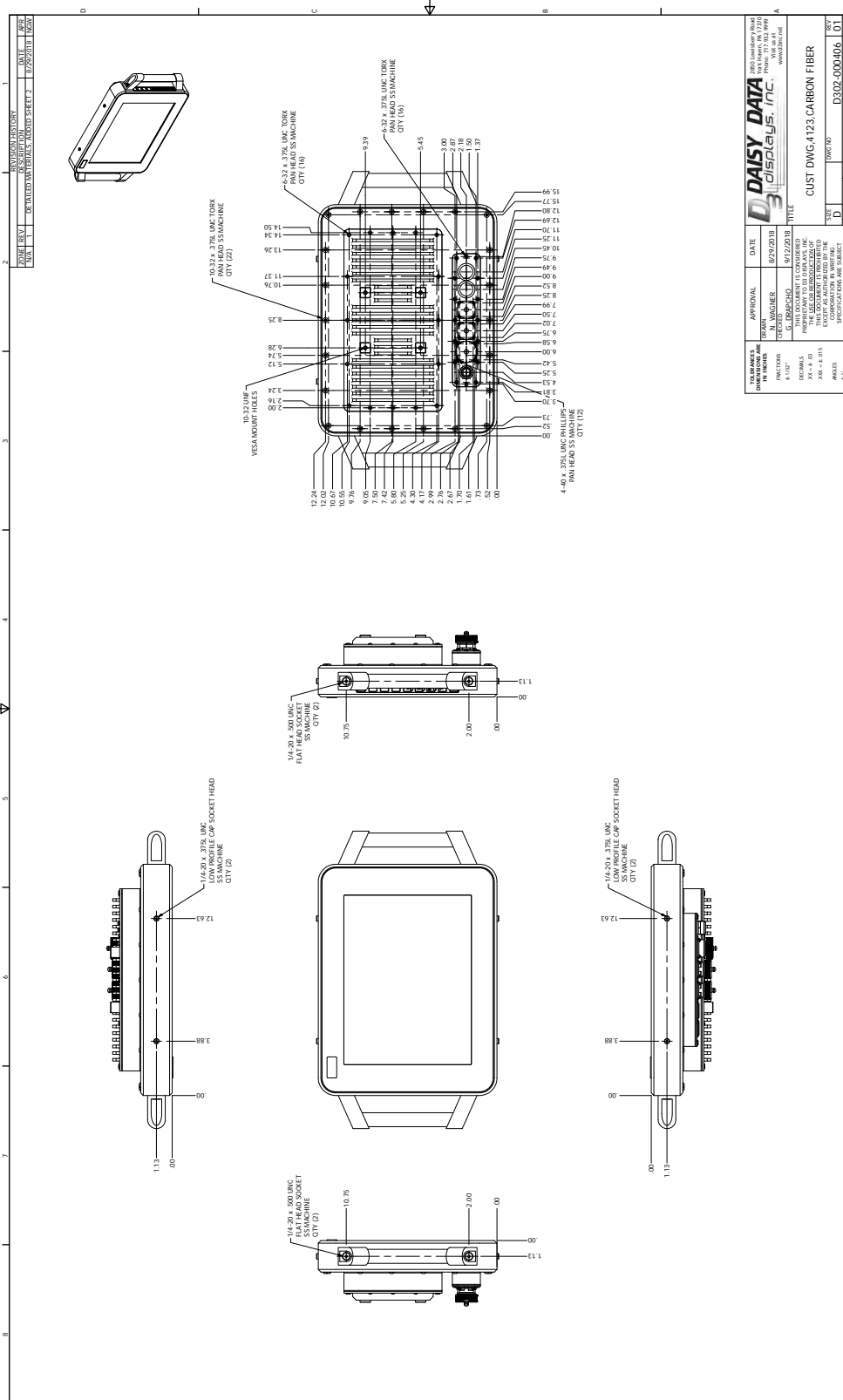


Figure 20 — Model 4123 Mechanical Drawing (2 of 2)



7.6.2 Model 4123AC Mechanical Drawings

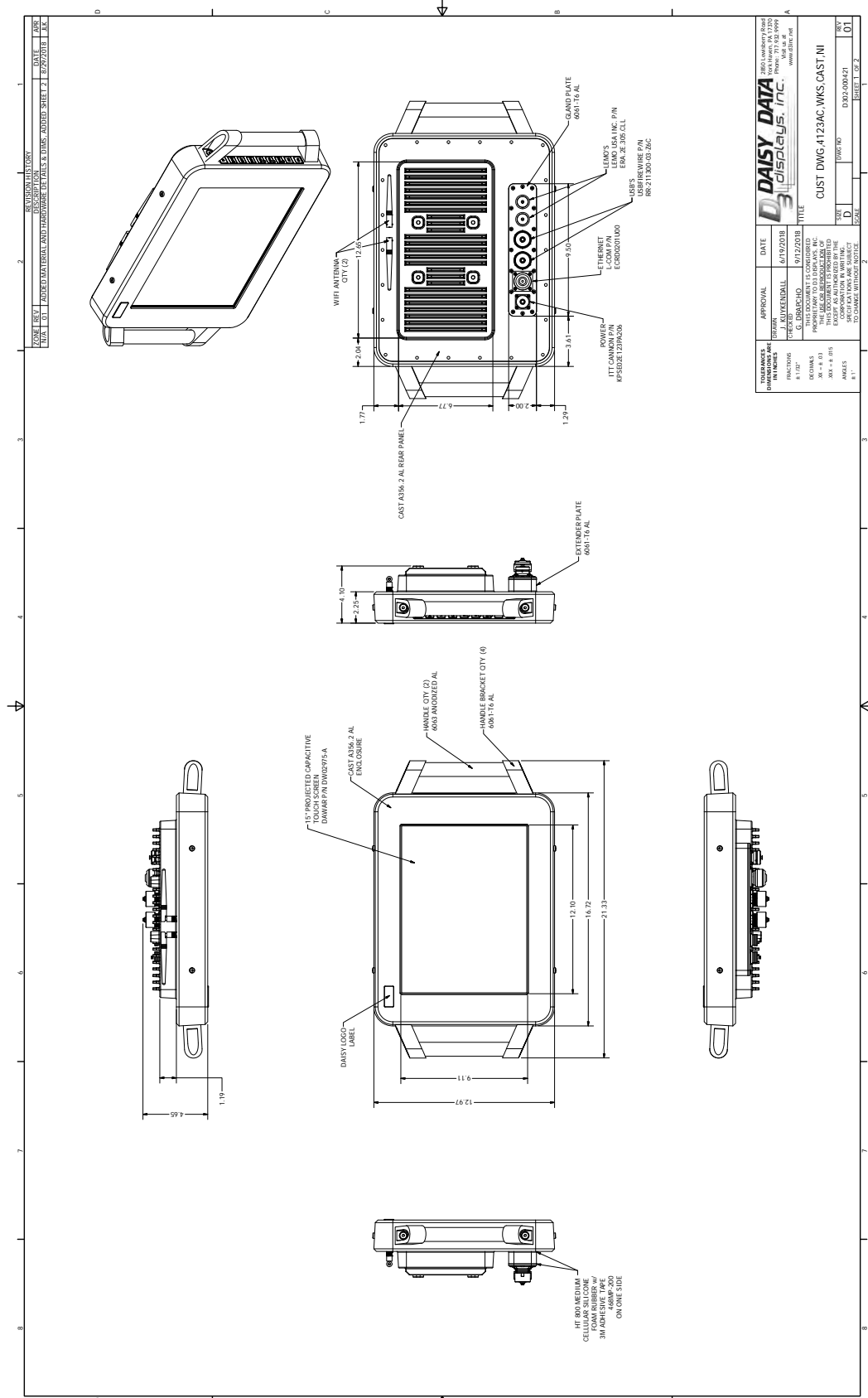


Figure 21 — Model 4123AC Mechanical Drawing (1 of 2)



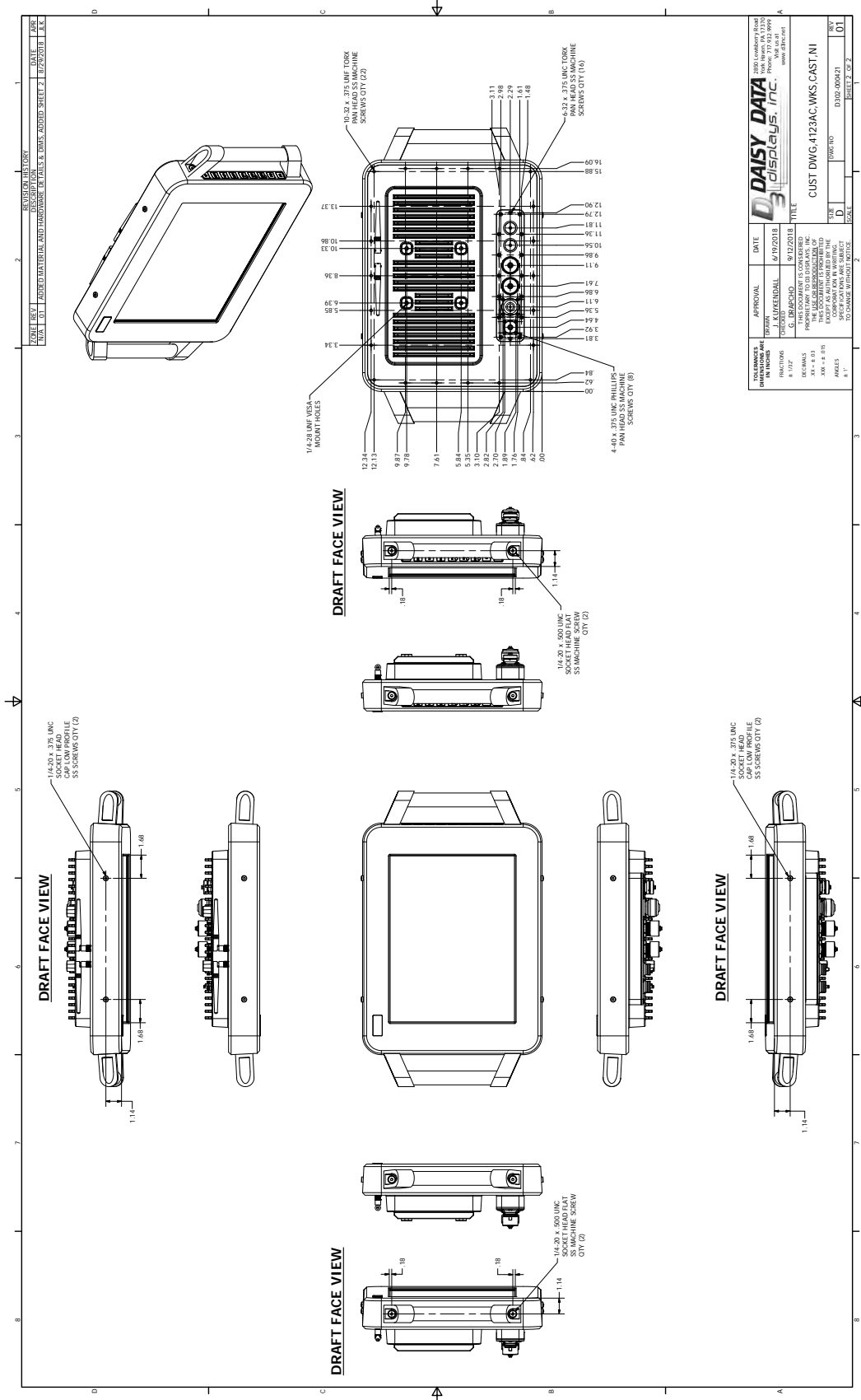


Figure 22 — Model 4123AC Mechanical Drawing (2 of 2)



7.6.3 Model 4123AD Mechanical Drawings

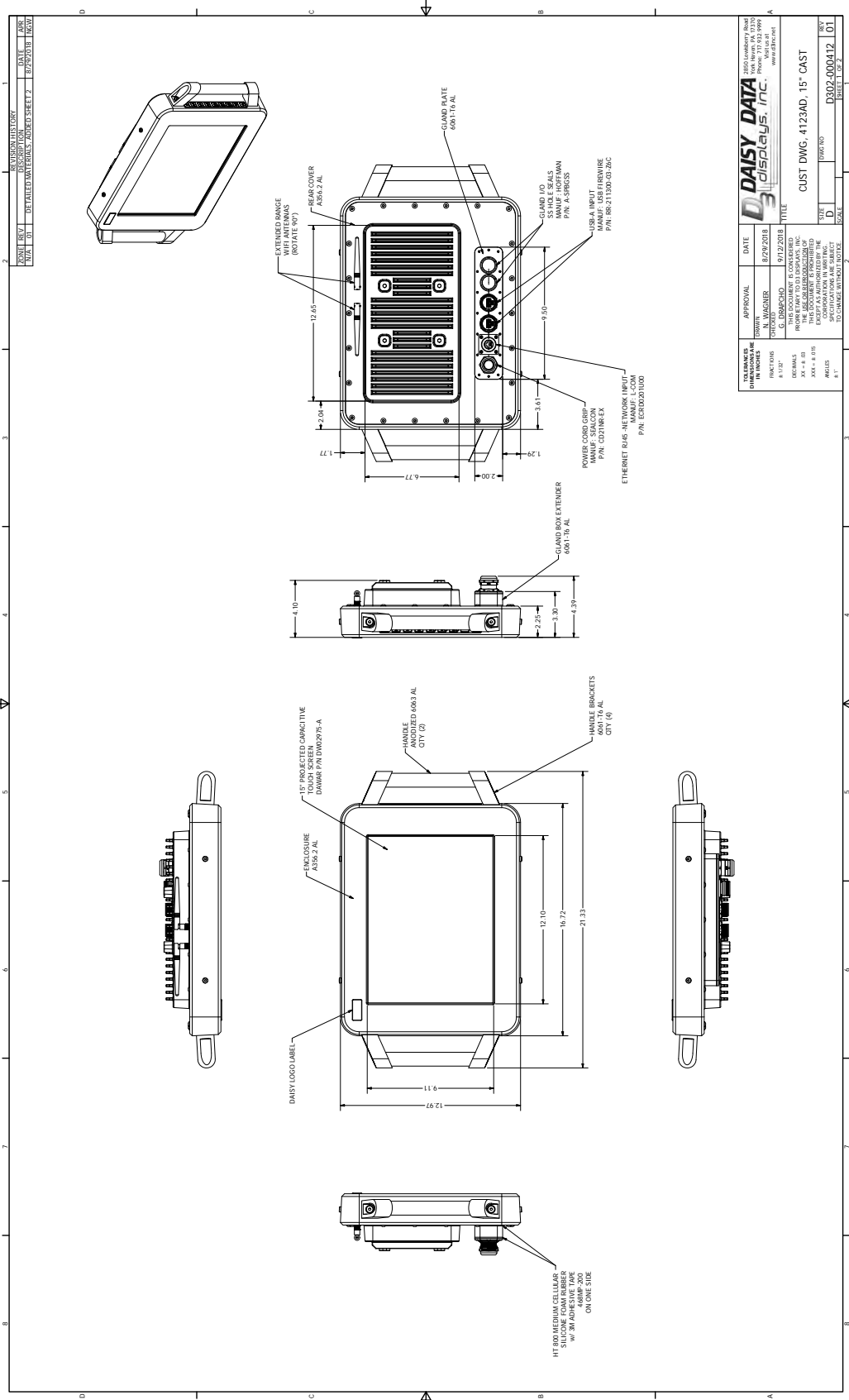


Figure 23 — Model 4123AD Mechanical Drawing (1 of 2)



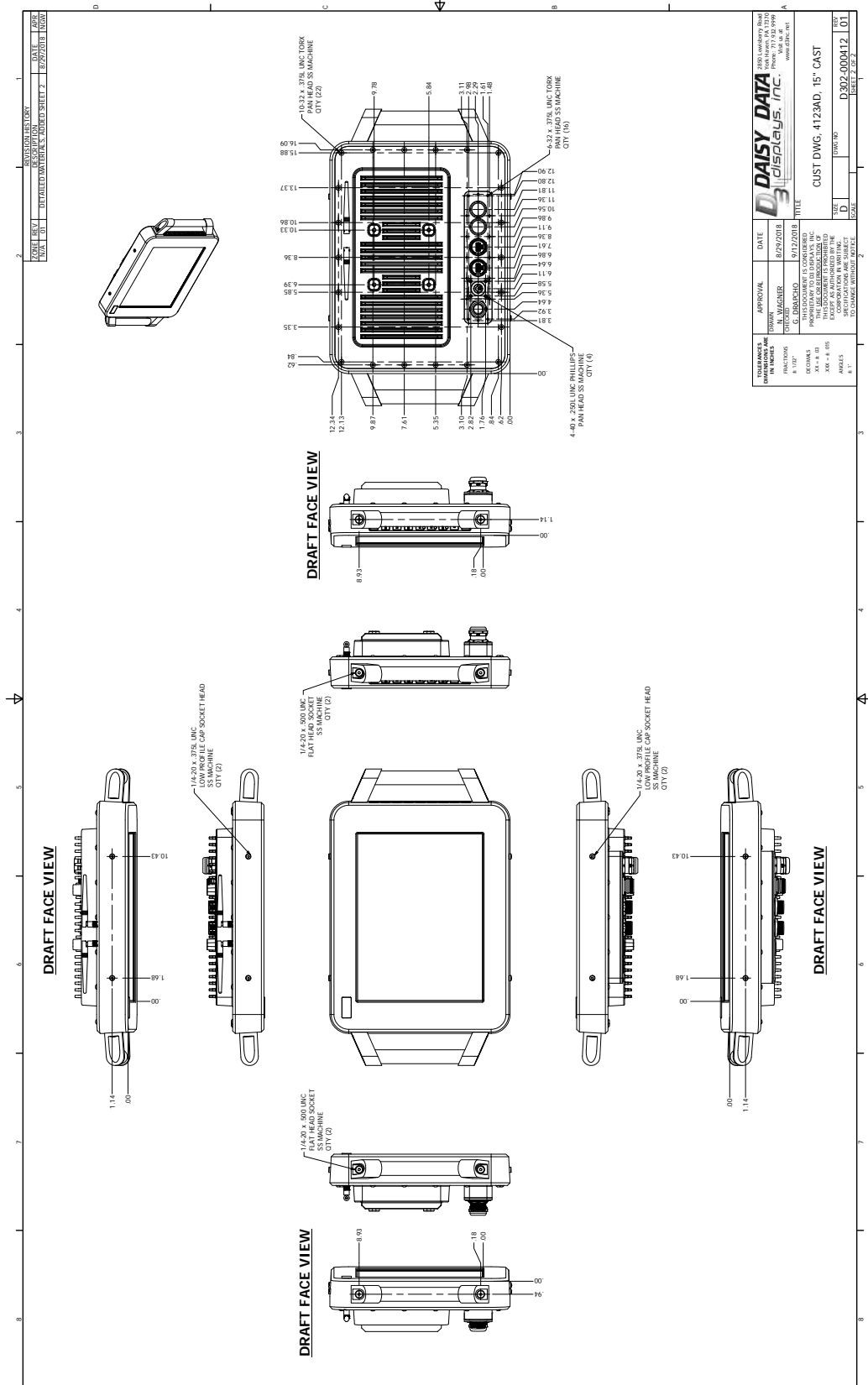


Figure 24 — Model 4123AD Mechanical Drawings (2 of 2)



7.6.4 Model 4123AE Mechanical Drawings

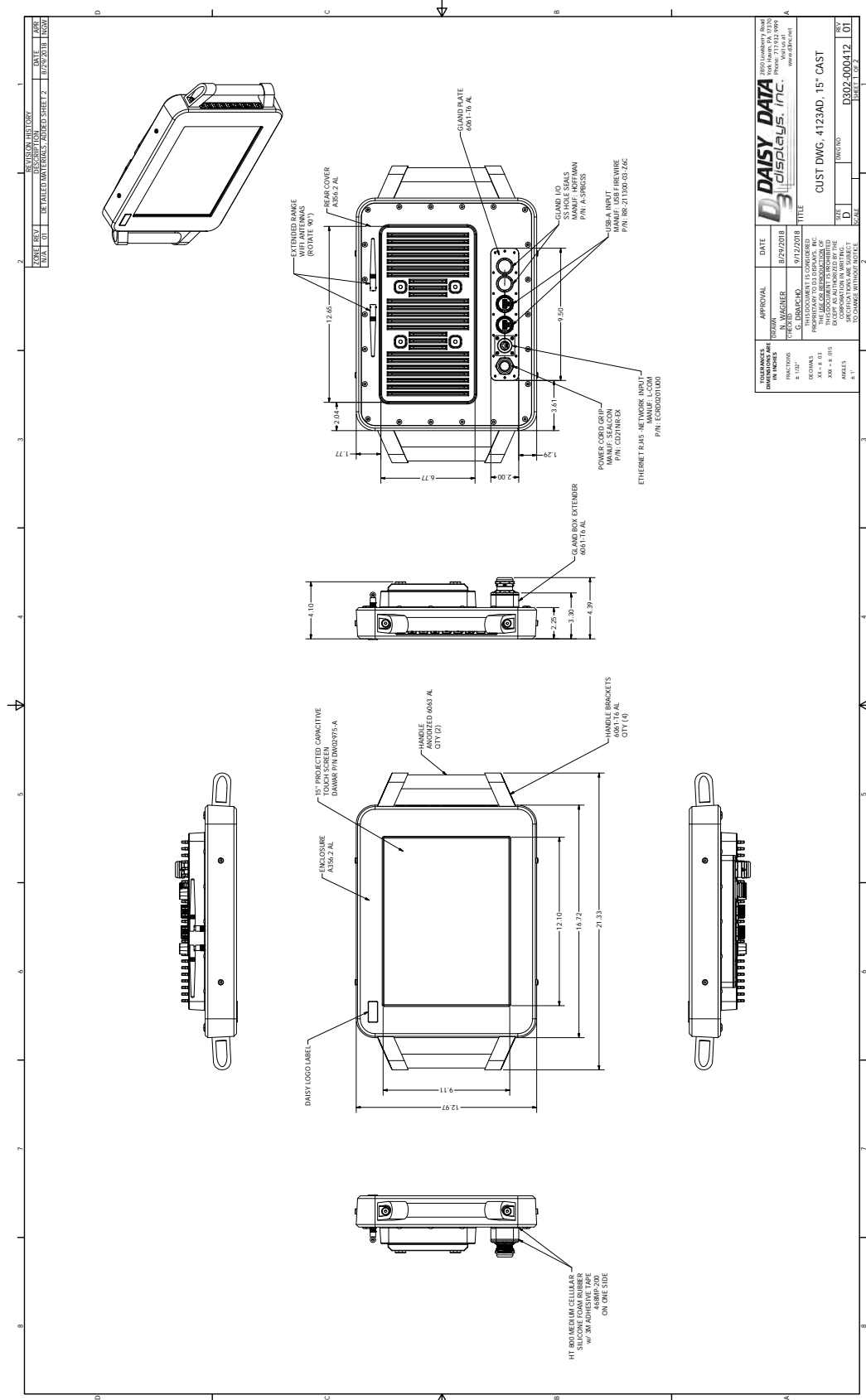


Figure 25 — Model 4123AE Mechanical Drawing (1 of 2)

REVISIONS	APPROVAL	DATE	TITLE
1	W. WAGNER	8/29/2018	CUST DWG - 4123AD, 15" CAST
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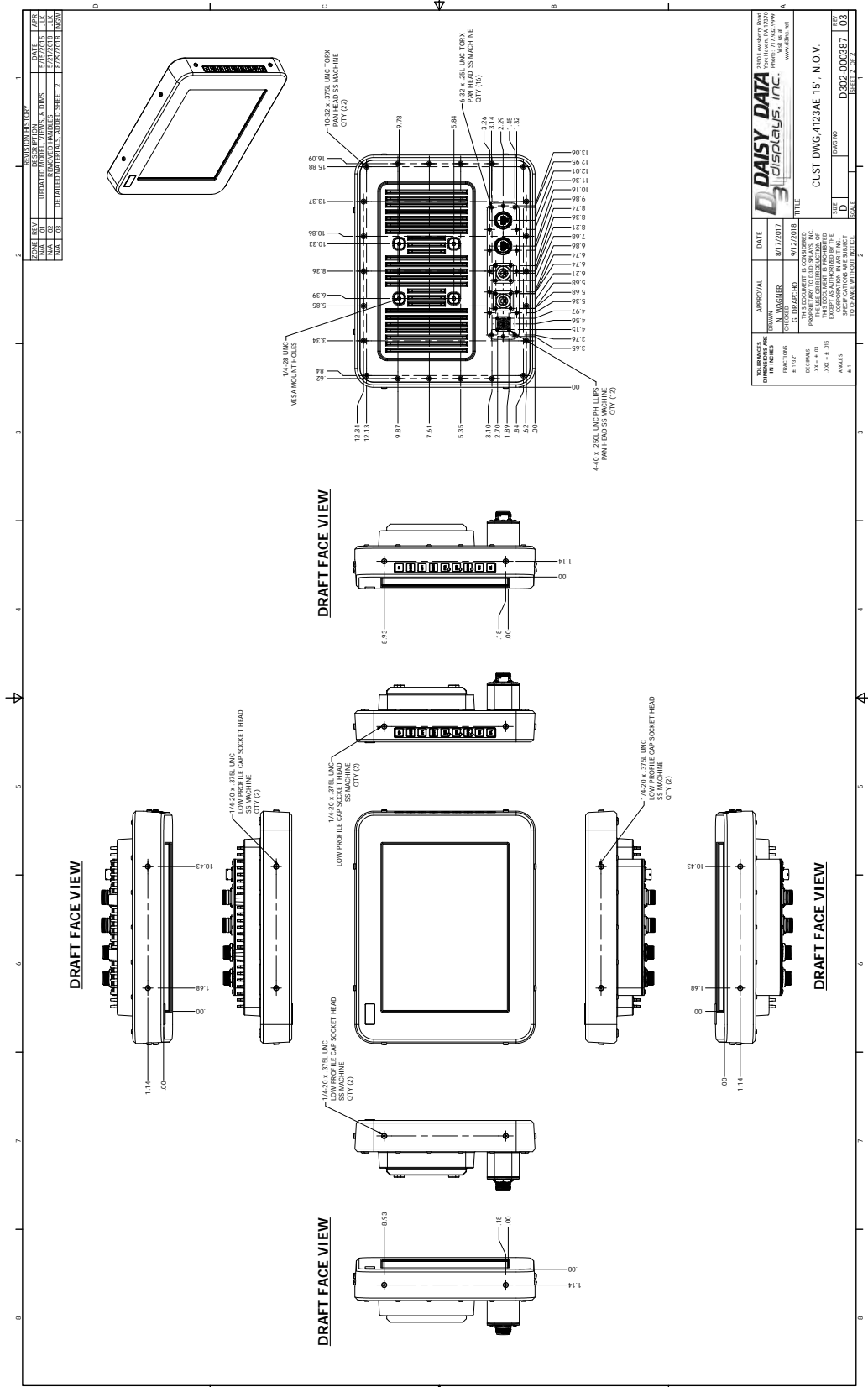


Figure 26 — Model 4123AE Mechanical Drawing (2 of 2)



7.6.5 Model 4123AF Mechanical Drawings

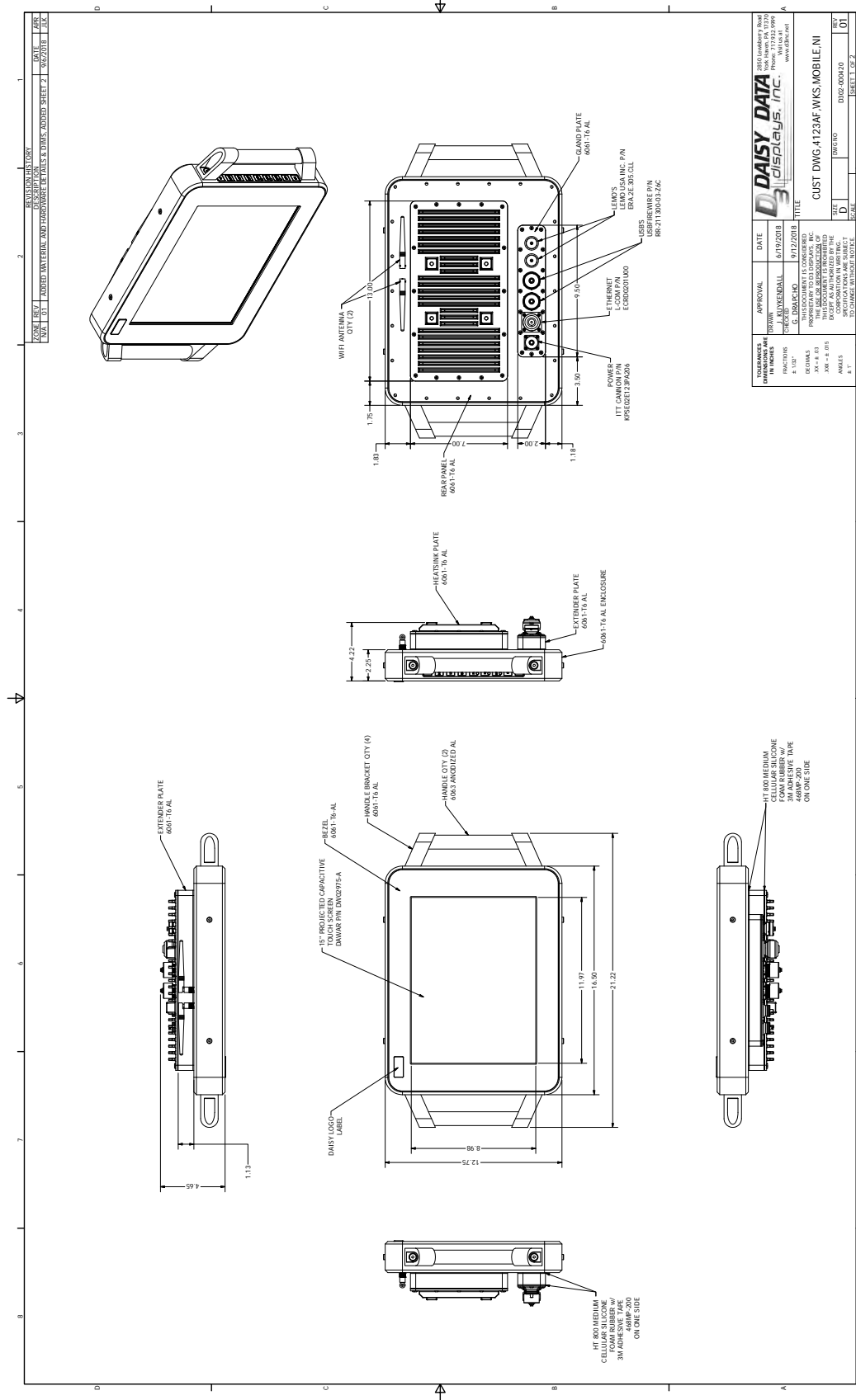


Figure 27 — Model 4123AF Mechanical Drawing (1 of 2)



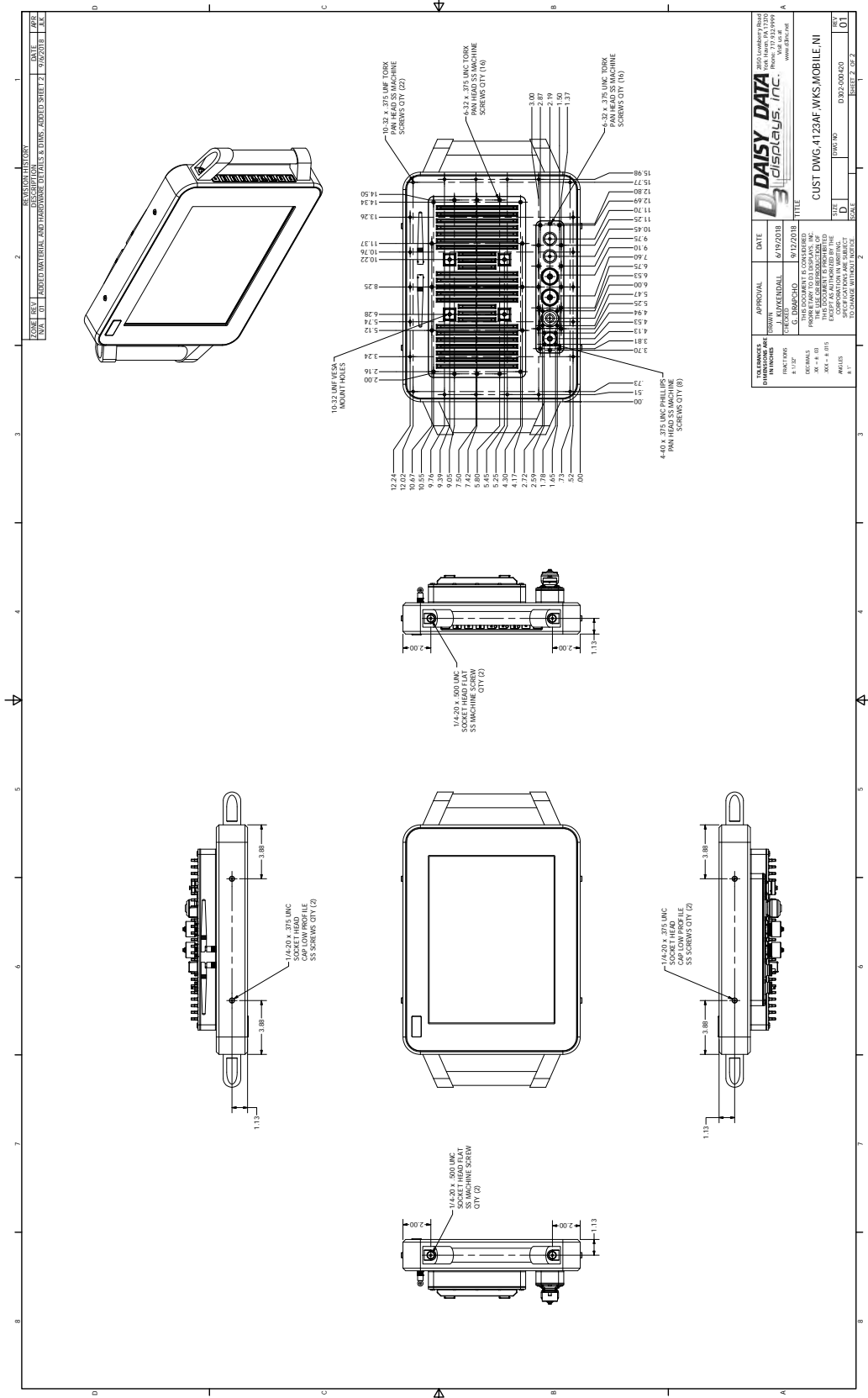


Figure 28 — Model 4123AF Mechanical Drawing (2 of 2)





8.0 Supply Power Connection (100-240VAC)

The end user is responsible for installation of AC power to, or into, the unit, depending on the model. All cables shall be ATEX approved as applicable. Models requiring cables to be installed, shall enter the enclosure using cable glands (provided) and installed per applicable industrial standards, as well as local and national code regulations.

! IMPORTANT !




Review [Section 10.0 Installation and Warnings](#) and [Section 12.0 Repair, Maintenance and Warnings](#) before installing or making any connections to the unit.

The Model 4123 Series units accommodates two different ways the customer can supply 100-240VAC power to the unit. Depending on the connection configuration (Glandplate) required by the customer, control power can be connected to the units by either:

-  Bayonet-style Quick Connect/disconnect Power Connection
-  Sealcon Cord Grip/Internal Power Connection

8.1 Bayonet-style Quick Connect/disconnect Power Connection

Three of the five Model 4123 Series configurations have a KPT/KPSE 26482-style male power connector on the glandplate to attach a 100-240VAC power source. They are (Model/Glandplate No.):

-  Model 4123AC (I640-002325)
-  Model 4123AE (I640-002323)
-  Model 4123AF (I640-002325)



**100-240VAC
KPT/KPSE 26482-style
Bayonet (Male) Connector**

Figure 29 — KPT/KPSE Bayonet-style Power Connector (Male)



8.1.1 Connecting KPT/KPSE Bayonet-style Quick Connect

The glandplates for models 4123AC, 4123AE, and 4123AF are equipped with a KPT/KPSE bayonet-style male power connector. A female version of the same connector is needed to connect to a 100-240VAC power source.

NOTE

The KPT/KPSE bayonet-style power connector needed to connect to a 100-240VAC power source can be obtained from a **vendor of your choosing**. It can also be purchased from Daisy Data Displays using part no. P130-000071-01.

Align the KPT/KPSE bayonet-style connectors so the female pin sockets align with the male pins. Gradually push the female connector onto the pins while rotating the female connector locking ring clockwise.

While rotating the locking ring, grooves in the ring will engage a set of pins on the outer casing of the male connector and pull both connectors together. Continue turning the locking ring until the pin engages (snaps into place), signifying a secure connection.



Figure 30 — 100-240VAC Power Connected

8.2 Sealcon Cord Grip/Internal Power Connection

Two of the five Model 4123 Series configurations have the 100-240VAC power source connected inside the unit enclosure. The power source cable passes through the enclosure via an Sealcon Cord Grip installed on the glandplate and attaches to a power terminal block.

This requires the removal of the glandplate, then passing the power source through the cord grip and glandplate and attaching it to the power source terminal mounted in the enclosure.

The models are (Model/Glandplate No.):



-  Model 4123 (I640-002303)
-  Model 4123AD (I640-002322)



Figure 31 — Power Supply connected through Sealcon Cord Grip

8.2.1 Installing Internally Connected Power Source Cable

Models that require an internal power source connection need to have the cable passed through the glandplate and attached to the internal power terminal connection. Where the cable passes through the glandplate, a Sealcon Cord Grip is provided to securely hold the cable in place and provides a tight seal where the cable penetrates the glandplate. This seal provides for the safe operation of the unit in the hazardous locations for which it has been rated.

Step 1) Remove sixteen (16) glandplate hold-down screws (6-32 Stainless Steel, Pan Head Torx Screws, 3/8"L). Carefully lift glandplate from glandplate box.

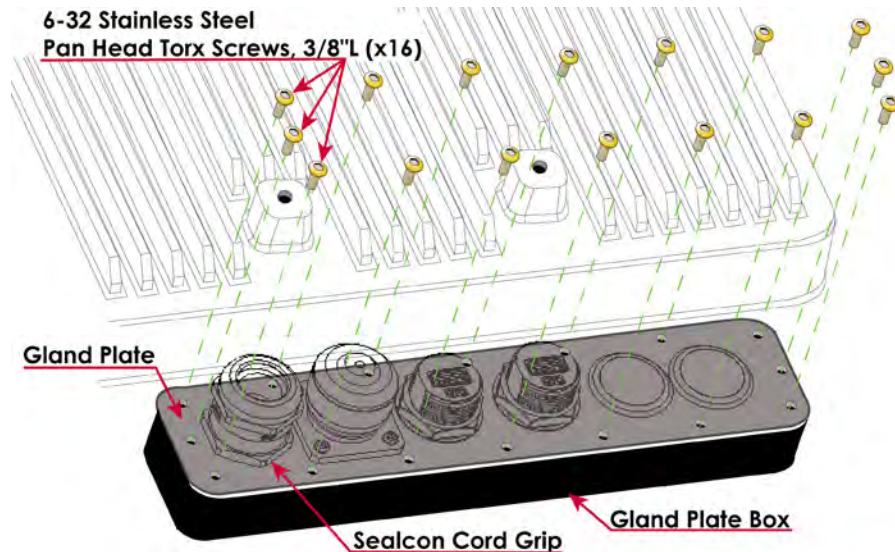


Figure 32 — Removing Glandplate

Step 2) Remove seal nut and the Sealcon Cord Grip from the glandplate.

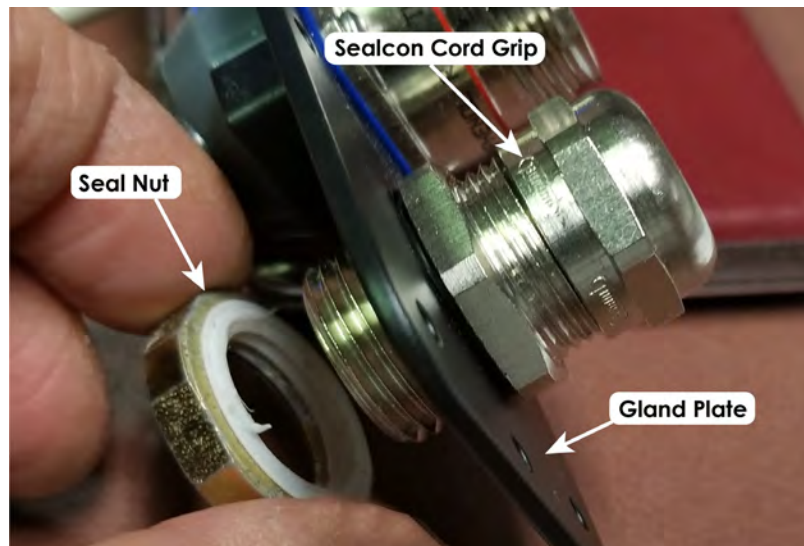


Figure 33 — Removing Cord Grip Seal Nut/Removing Seal Nut

Step 3) Locate power terminal connector inside the exposed glandplate box and unplug the source power terminal connector.



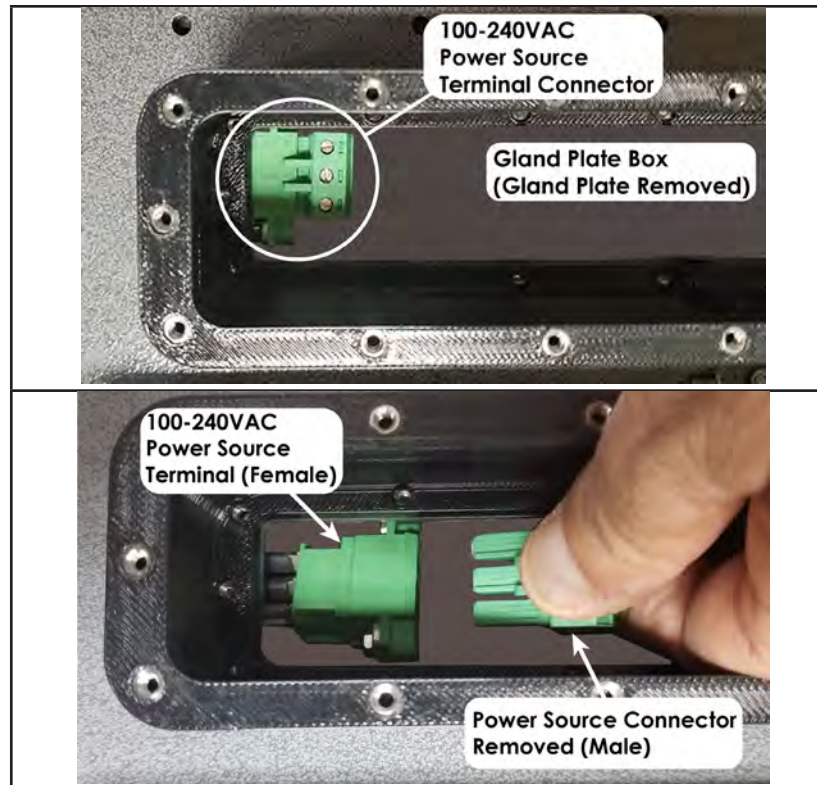


Figure 34 — Locate and Unplug Power Terminal Connector

NOTE: Before connecting your 100-240VAC power source to the connector plug removed in step 3, you must thread the power source cable through the cord grip, glandplate, and the cord grip seal nut.

Step 4) Thread power source cable through the Sealcon Cord Grip assembly, glandplate, and Cord Grip Seal Nut.

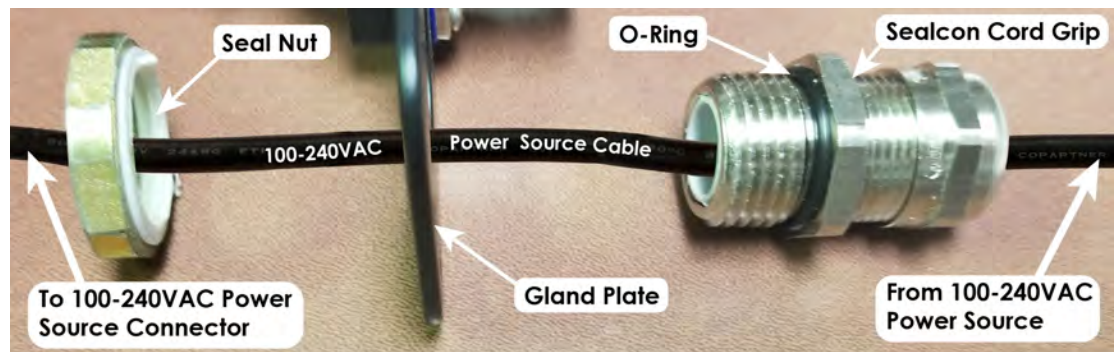


Figure 35 — Installing Power Source Cable through the glandplate

Step 5) Insert Sealcon Cord Grip back into the glandplate (See step 2 removal) and secure in place with the cord grip seal nut. Tighten the seal nut adequately to ensure the entire Sealcon Cord Grip is sealed through the glandplate.

NOTE: DO NOT TIGHTEN OUTER CORD GRIP NUT AT THIS TIME TO ALLOW THE POWER CABLE TO BE ADJUSTED THROUGH THE CORD GRIP AS NEEDED WHILE INSTALLING THE GLANDPLATE ASSEMBLY.

Step 6) Connect power source cable to the power source connector plug removed in step 3.

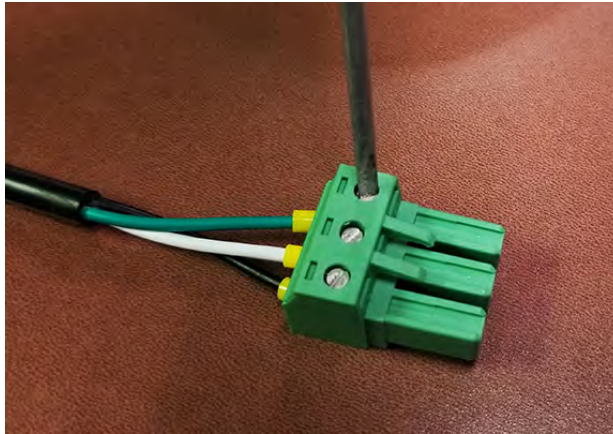


Figure 36 — Connect Power Source Cable to Power Source Connector Plug

Step 7) Plug power source connector plug (with power source cable attached) into the power source terminal in the enclosure (See step 3 removal and related figures).

Step 8) Install glandplate onto glandplate box. Secure glandplate in place with sixteen (16) glandplate hold-down screws (6-32 Stainless Steel, Pan Head Torx Screws, 3/8" L) (See step 1 removal).

NOTE: Carefully pull power cable through the cord grip while installing the glandplate. Leave a small amount of slack on the cable for inside the enclosure so any future removal of the enclosure back plate will not pull on the power source cable.

Step 9) Tighten the outer Sealcon Cord Grip cap nut until the sealing gasket completely encases and tightens around the power source cord.

IMPORTANT

The internal cord grip seal nut and the outer cord grip cable cap are integral in sealing the enclosure as needed for hazardous location usage.



9.0 Keypad Layout

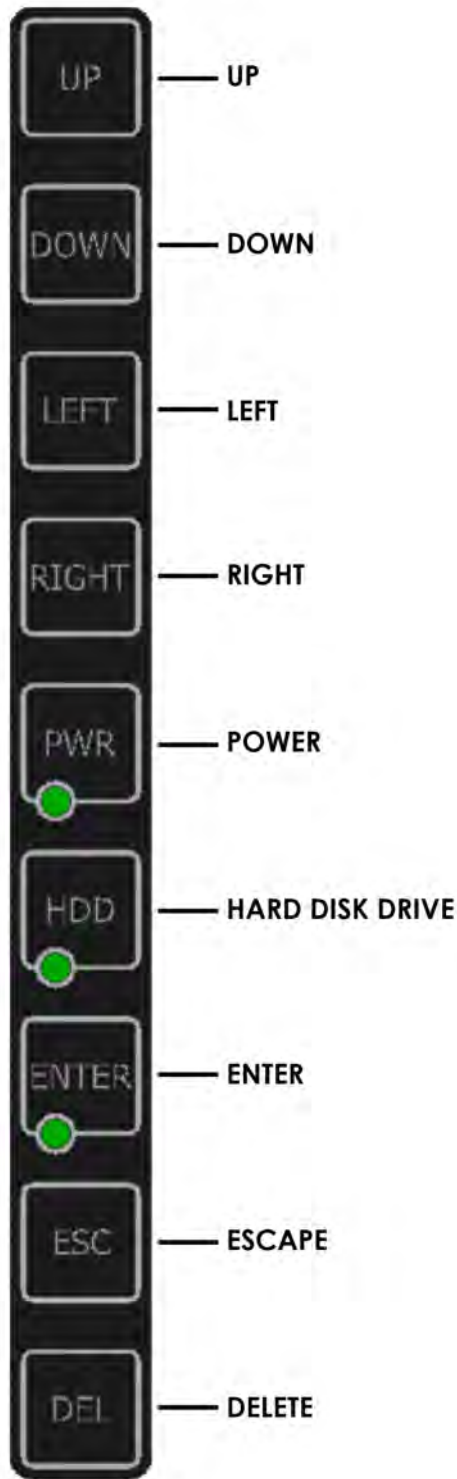


Figure 37 — Keyboard Membrane Layout



10.0 Installation and Warnings

WARNING: EXPLOSION HAZARD

DO NOT DISCONNECT EQUIPMENT WHILE THE CIRCUIT IS LIVE OR UNLESS THE AREA IS KNOWN TO BE FREE OF IGNITABLE CONCENTRATIONS.

WARNING: EXPLOSION HAZARD

SUBSTITUTION OF ANY COMPONENT MAY IMPAIR SUITABILITY FOR CLASS I, ZONE 2.

End user is responsible for installation of power input to unit. For proper use, all field wiring must be in compliance with applicable standards for ATEX Zone 2 areas. Installation must be done by a person familiar with the local regulations (AHJ.)

11.0 Battery Storage and Operation (Model 4123)

The standard battery incorporated into the ATEX certified 4123 is designed as a backup power source. In the instance of a loss of primary power, the computer will run off of its Lithium-Ion battery. The battery pack is a 14.4VDC, 2.9 Ah pack in a compact form factor. As such, it will only run the computer for up to approximately one (1) hour. It can be used in short cycles solely on battery, however it is recommended that the 4123 is used as a mounted, hardwired computer.

Charging: The battery charges when the unit is connected to its power source, and ends its charge cycle when at full capacity. A full charge will take about three hours to charge.

Storage: Though the battery is embedded in a weather resistant enclosure and the 4123 storage temperature is -20°C to +55°C, it is recommended that the battery not be subjected to long term storage at a temperature outside -20°C to +60°C. For ideal battery life, the battery should be within 30-50% capacity before placed into storage.

Life Expectancy: Under normal use and storage, the battery can be expected to deliver 80% or more of its initial capacity after 300 charge cycles.

WARNING

BATTERY IS NOT TO BE REMOVED AND REPLACED BY USERS

12.0 Repair, Maintenance and Warnings

WARNING: EXPLOSION HAZARD

DO NOT DISCONNECT EQUIPMENT WHILE THE CIRCUIT IS LIVE OR UNLESS THE AREA IS KNOWN TO BE FREE OF IGNITABLE CONCENTRATIONS.

WARNING: EXPLOSION HAZARD

SUBSTITUTION OF ANY COMPONENT MAY IMPAIR SUITABILITY FOR CLASS I, ZONE 2.

12.1 Repairs

Repairs and installation of this unit need to be performed by authorized personnel in accordance with the National Electrical Code (NEC) (NFPA), European Committee for Electrotechnical Standardization (CENELEC), Canadian Electrical Code (CEC), and any applicable local code regulations. Contact your local Authority having jurisdiction (AHJ) for assistance in field wiring in accordance with local code regulations. This unit incorporates static sensitive components which need to be handled carefully; be sure to follow all ESD safety procedures. The assembly of this unit cannot be opened while in operation.



12.2 Maintenance

Maintenance should be performed by authorized personnel. The only maintenance is periodic inspections for damage and proper operation. Any damaged parts or damaged cabling entering into the unit, need to be replaced promptly to ensure that the safety methods used, and their integrity are still valid.

The following details must be checked during installation and maintenance:

- Damage to the enclosure and seals
- Cables are held securely in place
- Clean unit enclosure with non-corrosive and noncombustible chemicals
- Any damage can invalidate the systems safety integrity
- National and local safety regulations
- National and local accident prevention regulations
- National and local assembly and installation regulations
- General recognized technical regulations
- Safety instructions within this document
- Characteristic values and rated operating conditions
- Product needs to maintain continuous operating temperature; the system should be observed frequently to insure system stability.
- Provision shall be made external to the equipment, to provide the transient protection device to be set at a level not exceeding 140% of the peak rated voltage value of 85V.
- Continuous energization of the overall equipment. Any interruptions in energization of any length requires a visual inspection for condensation / frost on any part followed by a warm-up period involving just the internal heaters and fans, with the electronics energized and the heaters de-energized only after the internal temperature exceeds 25°C.



13.0 4123(xx) General Trouble Shooting**4123(xx) General Trouble Shooting**

Problem	Solution 1	Solution 2	Solution 3
Computer will not power on	Check AC power cable.	Make sure the power supply is turned on.	Verify all components are seated properly.
The computer will not boot	Verify the computer is powered on.	Insure all cables are connected and secure.	Verify the drives are visible in the BIOS.
Touch screen is unresponsive	Determine if the entire screen is unresponsive.	Verify the LED's on the touch screen controller are lit. Verify the driver for the touch screen loaded for the correct COM port.	Reset the computer using the internal reset switch. *Note accessing the reset switch must be done in an ordinary location; Opening the door assembly is not permitted within hazardous locations.
Network failure	Check the network cable connection.	Check the control panel for network adapters.	Ping a known address on the network and verify connectivity.
No video output	Confirm that the display/PC is powered on.	Connect an external monitor directly to the motherboard and verify output.	Verify the display resolution is set for 1024x768.

Contact Daisy Customer Support for further assistance.

Phone: (717) 932-9999 x222

Email: support@daisydata.com



14.0 Revisions

Revision	Description	Date	Author
-	Initial Release	7/20/2018	BM

