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FabriVU Series 2 Printer Specifications

Description: Printer specifications should be used by customers and Field Service Engineers during initial

phases of printer logistics planning. This document is valid for the following serial numbers: FabriVU 180 - S/N 660/27 or greater FabriVU 340 - S/N 670/74 or greater FabriVU 340i - S/N 671/01 or greater FabriVU 520 - S/N 680/04 or greater A FORKLIFT is now an acceptable method of removing printer from truck and pallet; additional shipping bars added for all models based on Serial Number: FabriVU 180 - S/N 660/57 and LATER FabriVU 340 - S/N

670/99 and LATER FabriVU 340i - S/N 671/01 or greater FabriVU 520 - S/N 680/06 and LATER

Affected Printers: FabriVU 180, FabriVU 340, FabriVU 520

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1.0 Printer Specifications, Series 2 - FabriVU 180, 340, 340i and 520

Printer specifications should be used by customers, contractors, and Field Service Engineers during initial phases of printer logistics planning. Series 2 printers refer to the following serial numbers, based on electronics cabinet configurations:	ITS-00176, Rev. D
• FabriVU 180 - S/N 660/27 and LATER	
• FabriVU 340 - S/N 670/74 and LATER	
• FabriVU 340i - S/N 671/01 and LATER	
• FabriVU 180 - S/N 680/4 and LATER	
A FORKLIFT is now an acceptable method of removing printers from truck and pallet; additional shipping bars added for all models based on Serial Number:	
• FabriVU 180 - S/N 660/57 and LATER	
• FabriVU 340 - S/N 670/99 and LATER	
• FabriVU 340i - S/N 671/01 and LATER	
• FabriVU 520 - S/N 680/06 and LATER	

1.1 Safety

Please adhere to the following safety items:

OMM-00047	Inkjet Solutions Safety Guide	https://inkjet.support.efi.com/doc.php?doc=683
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1.2 Revision History

06/13/2017	A	 Updated Printer FabriVU 180 Printer Dimensions; updated Recommended Printer Working Clearances - All models; updated the following sections: AC Power Specifications, AC Electrical Cabinet Connections - 380v-480v; Electrical Cabinet - Less than 380v. Updated 380v - 480 Volt Configurations; updated Less than 380v Configurations. Updated Exhaust Blower Requirements to Mist Collector Requirements. See Available Mist Collectors. Mist collector is cut in by model serial number: 180 - S/N 32; 340 S/N 48; 520 - S/N 01. Updated Service Connection Locations and Layouts. ITS-00137 - Document is not applicable to later serial numbers; renamed as "Printer Specifications - Series 1"
10/24/2017	В	A FORKLIFT is now an acceptable method of removing printer from truck and pallet; additional shipping bars added for all models based on Serial Number.
04/20/2018	С	Added the 340i, In-line Sublimation model, to Specifications; Model numbers are 671/xx.
04/23/2018	D	Corrected Exhaust Extraction Unit connections.

1.3 Technical Support

Technical support for EFI Inkjet Solutions' customers is available 24 hours a day*.

Note: *A factory warranty or enrollment in a service plan is required for 24 hour support.

Visit http://www.efi.com/support-and-downloads/product-support/ for product support, contact information, and downloads.

1.4 Modifications

Do not modify the printer from its original design without the prior written approval of EFI Inkjet Solutions, or use unapproved accessories.

Warning: Using unapproved accessories or performing modifications to the printer can lead to serious injury to yourself or others, and even death.

1.5 Hazardous Voltage

All EFI printers contain Hazardous Voltage. Refer to your printer's individual *Operations Guide* and labels attached to the printer components for specific hazardous voltage areas on the printer. Printer operators and technicians must conform to the following guidelines at all times during printer use and maintenance:

- Live electrical terminals can kill. Ensure that the main disconnect switch is in the **Off** position prior to connecting to facility power.
- Ensure that the earth grounding connections between the printer and the host system are maintained at all times. See <u>AC Power Specifications</u>.

1.6 FabriVU 180 Printer Dimensions

Table 1: FabriVU 180 Printer

	Imp.	Metric
Printer Height	70.86"	180 cm
Printer + Light Stack height	88.58"	225 cm
Width (Front to Back)	85.83"	218 cm
Length (left to right)	178.74"	454 cm
Weight	6,504 lbs	2,950 kg

1.6.1 FabriVU 180 Printer and Pallet

Table 2: FabriVU 180 Printer and Pallet

	Imp.	Metric
Height	82.68"	210 cm
Width (Front to Back)	93.70″	238 cm
Length (left to right)	200.79"	510 cm
Weight	7,165 lbs	3,250 kg

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1.6.2 FabriVU 180 Printer, Pallet and Crate

Table 3: FabriVU 180 Printer, Pallet and Crate

	Imp.	Metric
Height	87.4"	222 cm
Width (Front to Back)	86.2"	219 cm
Length (left to right)	204.72"	520 cm
Weight	7,639 lbs	3,465 kg

1.6.3 Rigging Requirements - FabriVU 180

A forklift can be used to lift the FabriVU 180 printer off the delivery vehicle and off the crate. A crane equipped with a two meter (6.5') spreader bar, with rated cables, is also an acceptable method to hoist the FabriVU 180 printer off the delivery vehicle and off the crate.

Table 4: Forklift Requirements

	Imp.	Metric
Minimum Fork Length	79"	2 m
Lifting Rated capacity - Forklift (or crane)	11,000 lbs.	5,000 kg

1.7 FabriVU 340/340i Printer Dimensions

Table 5: FabriVU 340 Printer

	Imp.	Metric
Height	70.86"	180 cm
Printer + Light stack height	88.58"	225 cm
Width (Front to Back)	85.83"	218 cm
Length (left to right)	242.13"	615 cm
Weight	8,267 lbs	3,750 kg

1.7.1 FabriVU 340/340i Printer and Pallet, and Dimensions

Table 6: FabriVU 340 Printer and Pallet

	Imp.	Metric
Height	74.8"	189.0 cm
Width (Front to Back)	94.0	238.75 cm
Length (left to right)	253.0"	642.7 cm
Lifting Skids, center to center	48"	120.0 cm
Weight	9,330 lbs	4,232 kg

1.7.2 FabriVU 340/340i Printer, Pallet and Crate, and Dimensions

Table 7: FabriVU 340 Printer, Pallet, and Crate

	Imp.	Metric
Height	87.0"	221.0 cm
Width (Front to Back)	95.0"	241.5 cm
Length (left to right)	253.5"	644.0 cm
Weight	10,851 lbs	4,922 kg

1.7.3 FabriVU 340i Exhaust Extraction Unit and Dimensions

Table 8: FabriVU 340i Printer, Pallet, and Crate

	Imp.	Metric
Height, including	82.8"	210 cm
Width (Front to Back)	54.0"	137 cm
Length (left to right, including AC disconnect	34.5"	87 cm
Weight	2,120 lbs	961.3 kg



1.7.4 Rigging Requirements - FabriVU 340/340i

A forklift can be used to lift the FabriVU 340/340i printer off the delivery vehicle and off the crate. A crane equipped with a two meter (6.5') spreader bar, with rated cables, is also an acceptable method to hoist the FabriVU 340/340i printer off the delivery vehicle and off the crate.

Table 9: Forklift Requirements

	Imp.	Metric
Forklift fork length, minimum	79″	2 m
Forklift width required	48"	120.0 cm
Lifting Rated capacity - Forklift or Crane	14,000 lbs.	6,350 kg

1.8 FabriVU 520 Printer Dimensions

Table 10: FabriVU 520 Printer

	Imp.	Metric
Printer Height	86.22"	219 cm
Printer + Mist Collector height	102.75"	261 cm
Width (Front to Back)	85.83"	218 cm
Length (left to right)	315.35"	801 cm
Weight	17,196 lbs	7,800 kg

1.8.1 FabriVU 520 Printer, Pallet and Crate, and Moving Dimensions

Table 11: FabriVU 520 Printer, Pallet, and Crate

	Imp.	Metric
Height	90.25"	229.0 cm
Width (Front to Back)	90.55"	230.0 cm
Length (left to right)	330.5"	840.0 cm
Weight	18,850 lbs	8,550 kg

1.8.2 Rigging Requirements - FabriVU 520

A forklift can be used to lift the FabriVU 520 printer off the delivery vehicle and off the crate. A crane equipped with a 2M (6.5') spreader bar, with rated cables, is also an acceptable method to hoist the FabriVU 520 printer off the delivery vehicle and off the crate.

Table 12: Forklift/Crane Requirements, FabriVU 520

	Imp.	Metric
Rated Lifting capacity - Forklift or Crane	24,000 lbs.	10,886 kg

Table 13: Cable/Chain Requirements, FabriVU 520

	Imp.	Metric
4 belts or chains minimum load per belt	6,615 lbs.	3,000 kg
Cable A	117.7"	299 cm
Cable B	120.9"	307 cm
Cable C	127.6"	324 cm
Cable D	122.5"	311 cm



Suggested chain length to balance load A: 117.7" or 299 cm B: 120.9" or 307 cm C: 127.6" or 324 cm D: 122.5" or 311 cm Required capacity for each chain: 6,615 lbs or 3,000 kg

Figure 1-1: Suggested Chain Length, FabriVU 520



1.9 Mist Collector Requirements

The <u>Available Mist Collectors</u> are self-contained units that do not require an external ventilation system. Refer to <u>Mist Collector Requirements - FabriVU 180 and 340</u> and <u>Mist Collector Requirements - FabriVU 520</u>. Also see <u>Exhaust Extraction</u> Unit Requirements - FabriVU 340i.

1.9.1 Available Mist Collectors

There are different requirements for the LOSMA Mist Collectors based on model:

- FabriVU 180 (1) LOSMA Galileo 500
- FabriVU 340 (1) LOSMA Galileo 1000
- FabriVU 520 (2) LOSMA Galileo 500

1.9.2 Mist Collector Requirements - FabriVU 180 and 340

One mist collector is shipped with the 180 or 340 model printers. These systems remove smoke and mist from the print area environment. The mist collector is installed inside the Maintenance cabinet for these models.

1. Place the mist collector inside the front, RH printer cabinet, on the floor.



Figure 1-2: LOSMA, Galileo Plus Mist Collector

- 2. Connect the printer exhaust hose to the mist collector IN port and secure hose.
- 3. Connect the drain tube from the side drain tube to the waste container and secure.



1.9.3 Exhaust Extraction Unit Requirements - FabriVU 340i

One exhaust extraction unit is shipped with the 340i model printers. These systems remove smoke and mist from the print area environment. The exhaust extraction unit is installed next to the Printer Exhaust Port.

1. Place the exhaust extraction unit near the exhaust port on the printer. The TOP exhaust inlet port on the extraction unit should be aligned with the printer Exhaust Port.

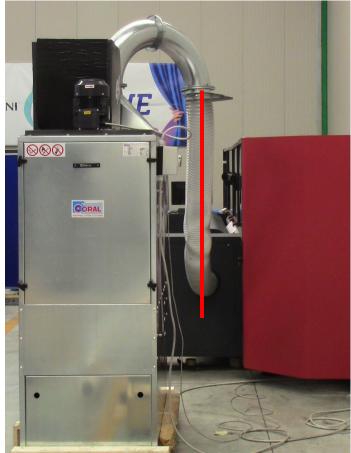


Figure 1-3: Exhaust Extraction Unit - Align Printer OUT port with Extraction unit IN port (red line)

- 2. Connect the printer exhaust hose to the Exhaust Extraction Unit IN port and secure hose.
- 3. Connect the exhaust hose to the Printer Exhaust OUT port.



1.9.4 Mist Collector Requirements - FabriVU 520

Two mist collectors are shipped with the 520 model printer. These systems remove smoke and mist from the print area environment. The 520 model collectors are top-mounted.

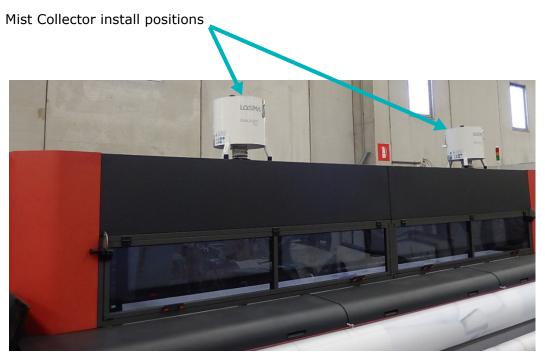


Figure 1-4: Mist collector install positions, FabriVU 520, Printer Front view

- 1. Place the mist collectors motors on the top of the printer and bolt the in place using supplied hardware.
- 2. Connect drain tubes to mist collectors and run drain tubes together to a waste container.

1.10 Recommended Printer Working Clearances - All models

The FabriVU printers require adequate floor space to allow safe operation, including loading and unloading media safely. The following diagram indicates the minimum printer floor space required, as well as the additional space required for loading and removing the media.

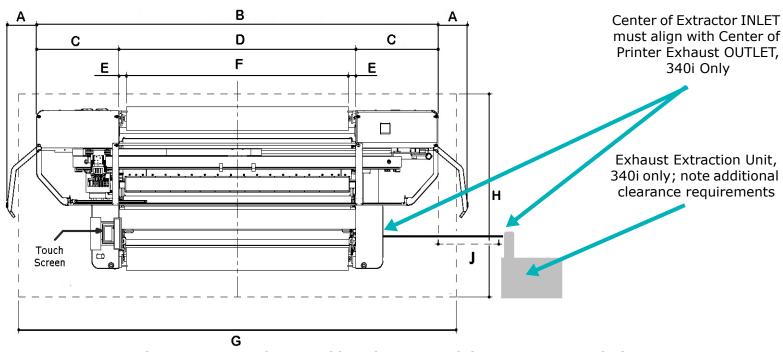


Figure 1-5: Top view, working clearance minimum recommendations

Table 14: Working Clearances

	FabriVU 180	FabriVU 340/340i	FabriVU 520		FabriVU 180	FabriVU 340i	FabriVU 340	FabriVU 520
Α	28 cm	28 cm	28 cm	Е	11 cm	11.5 cm	11.5 cm	11.5 cm
В	454 cm	615 cm	802 cm	F	180 cm	340 cm	340 cm	518 cm
С	126 cm	126 cm	127 cm	G	754 cm	1,070 cm	915 cm	1102 cm
D	203 cm	363 cm	547 cm	Н	518 cm	600 cm	518 cm	578 cm
	1	•	·	J	n/a	60 cm	n/a	n/a

1.11 AC Power Specifications

Power cables and facility breakers are not supplied with the printer. Power cables and facility breakers must be sized by a licensed electrician familiar with industrial equipment power requirements due to differences in site voltage, amperage, and kW, as well as local electrical codes.

The electrician must ensure the dedicated power sources for the printer automation and the printer computer meet these specifications.

Danger! The electrician must measure all Phase to Phase, and Phase to Ground voltages. Voltage differences **must be** less than 10%. Never connect or operate a printer with unbalanced AC power.

1.11.1 Main AC Breaker

The Printer Main AC Breaker is set from the factory for <u>380v - 480 Volt Configurations</u> at 80A. The switch can be configured for 100A for Less than <u>380v Configurations</u>.



Figure 1-6: Printer Main AC Breaker, with 100A/80A Switch highlighted



1.12 380v - 480 Volt Configurations

480v configurations consume less current than other configurations, however, the main breakers are rated the same. See <u>Transformer Requirements for Printer Automation Power Supply</u>.

Table 15: FabriVU 180 Electrical Requirements - 380v-480v

Description	Rated Voltage and Frequency	Full Load Current
Printer Automation - S/N >=660/27	3 x 400v (+/- 10%) 50 Hz/60 Hz, OR ,	43 amps / 400 VAC 42 amps / 415 VAC
Printer Computer Power	1 x 230v, 50 Hz/60 Hz, 1 kW - OR - 1 x 120v, 50 Hz/60 Hz	

Table 16: FabriVU 340 Electrical Requirements - 380v-480v

Description	Rated Voltage and Frequency	Full Load Current
Printer Automation - S/N >=670/74	3 x 400v (+/- 10%) 50 Hz/60 Hz, OR , 3 x 415v (+/- 10%) 50 Hz/60 Hz, OR ,	72 amps / 380 VAC 69 amps / 400 VAC 66 amps / 415 VAC 62 amps / 440 VAC 57 amps / 480 VAC
Printer Computer Power	1 x 230v, 50 Hz/60 Hz, 1 kW - OR - 1 x 120v, 50 Hz/60 Hz	

Table 17: FabriVU 340i Electrical Requirements - 380v-480v

Description	Rated Voltage and Frequency	Full Load Current
Printer Automation - S/N >=671/01	3 x 380v (+/- 10%) 50 Hz/60 Hz, OR , 3 x 400v (+/- 10%) 50 Hz/60 Hz, OR , 3 x 415v (+/- 10%) 50 Hz/60 Hz, OR , 3 x 440v (+/- 10%) 50 Hz/60 Hz, OR , 3 x 480v (+/- 10%) 50 Hz/60 Hz	77 amps / 380 VAC 73 amps / 400 VAC 70 amps / 415 VAC 66 amps / 440 VAC 60 amps / 480 VAC
Printer Computer Power	1 x 230v, 50 Hz/60 Hz, 1 kW - OR - 1 x 120v, 50 Hz/60 Hz	



Description	Rated Voltage and Frequency	Full Load Current
Printer Automation - S/Ns >=680/04	3 x 380v (+/- 10%) 50 Hz/60 Hz, OR , 3 x 400v (+/- 10%) 50 Hz/60 Hz, OR , 3 x 415v (+/- 10%) 50 Hz/60 Hz, OR , 3 x 440v (+/- 10%) 50 Hz/60 Hz, OR , 3 x 480v (+/- 10%) 50 Hz/60 Hz	57 amps / 380 VAC 54 amps / 400 VAC 52 amps / 415 VAC 49 amps / 440 VAC 45 amps / 480 VAC
Printer Computer Power	1 x 230v, 50 Hz/60 Hz, 1 kW - OR - 1 x 120v, 50 Hz/60 Hz	

1.13 Less than 380v Configurations

Printers configured from the factory requiring a transformer will require the <u>Main AC Breaker</u> to be configured to 100A. Refer to <u>100A/80A Switch</u>. FSEs should verify the Printer Main AC Breaker is configured for 100A service prior to connecting power if there any configuration questions.

1. Access the rear of the Printer Main AC Breaker and remove cover.



Figure 1-7: Printer Main AC Breaker cover

- 2. Remove breaker and set the 100A/80A Switch to 100A.
- 3. Replace breaker and cover.

Danger! Take extreme care when using alternate configurations. It may be necessary to verify that the correct transformer is included and the Printer Main AC Breaker is configured correctly **PRIOR TO** powering on printer.



1.13.1 208v Electrical Requirements

Table 19: FabriVU 180 Electrical Requirements - 208v

Description	Rated Voltage and Frequency	Full Load Current
Printer Automation - S/N >=660/27	3 x 208v (+/- 10%) 50 Hz/60 Hz	83 amps / 208 VAC
Printer Computer Power, Figure 1-9 and Figure 1-10	1 x 230v, 50 Hz/60 Hz, 1 kW - OR - 1 x 120v, 50 Hz/60 Hz	

Table 20: FabriVU 340 Electrical Requirements - 208v

Description	Rated Voltage and Frequency	Full Load Current
Printer Automation - $S/N >= 670/74$	3 x 208v (+/- 10%), 50 Hz/60 Hz	100 amps / 208 VAC
Printer Computer Power, Figure 1-9 and Figure 1-10.	1 x 230v, 50 Hz/60 Hz, 1 kW - OR - 1 x 120v, 50 Hz/60 Hz	

Table 21: FabriVU 340i Electrical Requirements - 208v

Description	Rated Voltage and Frequency	Full Load Current
Printer Automation - $S/N >= 671/01$	3 x 208v (+/- 10%), 50 Hz/60 Hz	100 amps / 208 VAC
Printer Computer Power, Figure 1-9 and Figure 1-10.	1 x 230v, 50 Hz/60 Hz, 1 kW - OR - 1 x 120v, 50 Hz/60 Hz	

Table 22: FabriVU 520 Electrical Requirements - 208v

Description	Rated Voltage and Frequency	Full Load Current
Printer Automation - S/Ns >=680/04	3 x 208v (+/- 10%), 50 Hz/60 Hz	100 amps / 208 VAC
Printer Computer Power, Figure 1-9 and Figure 1-10.	1 x 230v, 50 Hz/60 Hz, 1 kW - OR - 1 x 120v, 50 Hz/60 Hz	

1.13.2 Peak Power Consumption

Printer Type	Total kW
FabriVU 180 Printer Automation	24 kW
FabriVU 340 Printer Automation	38 kW
FabriVU 340i Printer Automation	42 kW
FabriVU 520 Printer Automation	30 kW

1.13.3 AC Power Connection

The AC Power connection procedure must be completed by a licensed/certified electrician hired by the customer. Field Service Engineers must **never** perform electrical connections.

The licensed/certified electrician must size the AC power cables and the customer must supply cables in accordance with the instructions received from the licensed/certified electrician.

1.13.3.1 Three Phase Configurations - Printer Automation

This section defines the three phase electrical configurations for the main printer automation power supply.

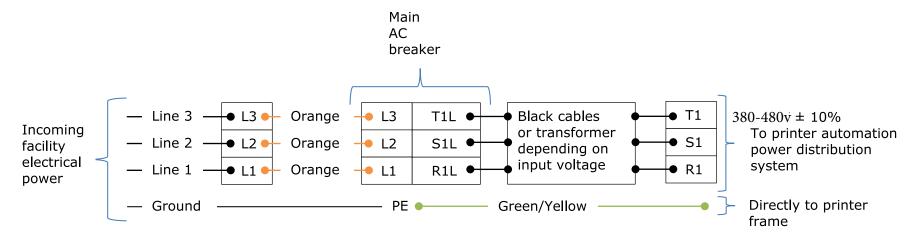


Figure 1-8: Three-phase electrical configuration for main printer automation power supply

- **Danger!** The maximum operating voltage of the Main AC breaker is 690v. DO NOT connect an input voltage GREATER THAN 690v to L1, L2, L3.
- **Danger!** It is extremely important to ensure the Three-phase electrical configuration for printer automation power supply is correct, PRIOR to connecting the printer to the three-phase AC power supply. Connecting an incorrect power supply to the main AC breaker or to the printer automation power distribution system may damage the printer.
- **Danger!** All ORANGE electrical lines are considered, "**WIRES ALWAYS UNDER VOLTAGE**." Never touch or work on any ORANGE electrical lines when printer automation or printer computer is connected to facility power source.

1.13.4 Power Connection - Printer Computer

The Printer Computer power source has two possible configurations: <u>230v Power Source</u> or <u>120v Power Source</u>, based on local power configuration. European and Asian countries typically use a 230 volt power supply, while others may use a 120 volt power supply.

1.13.4.1 230v Power Source

The printer computer power source is separate from the printer automation power supply. This section outlines a 230v power supply. Also see Printer Computer Power Supply Connection - 120v.

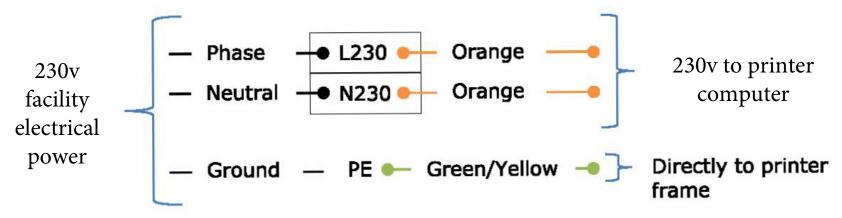


Figure 1-9: Printer computer 230v power connection

Danger! All ORANGE electrical lines are considered, "WIRES ALWAYS UNDER VOLTAGE." Never touch or work on any ORANGE electrical lines when printer automation or printer computer is connected to facility power source.



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1.13.4.2 120v Power Source

The printer computer power source is separate from the printer automation power supply. This section outlines a 120v power supply. Also see <u>Printer Computer Power Supply Connection - 230v</u>.

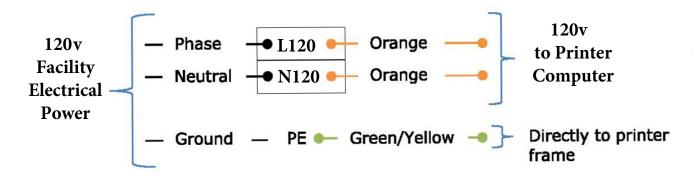


Figure 1-10: Printer computer 120v power connection

Danger! All ORANGE electrical lines are considered "WIRES ALWAYS UNDER VOLTAGE." Never touch or work on any ORANGE electrical lines when printer automation or printer computer is connected to facility power source.

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1.13.5 Transformer Requirements for Printer Automation Power Supply

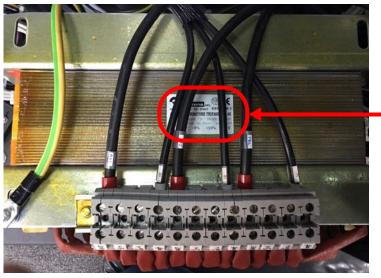
Facilities with less than 380v require an additional transformer.

The electrician must verify and configure the transformer *regardless of factory configuration*. <u>Table 23:</u> determines the transformer requirements to supply the printer automation power distribution system with the correct voltage.

Table 23: Transformer Requirements

Facility Voltage	Transformer required?
Less than 380v	Yes
380v to 480v	No

• If the transformer voltages do not match the facility IN power values, <u>Figure 1-11</u>, DO NOT CONNECT PRINTER TO FACILITY POWER. Contact Technical Support; a replacement transformer **must be ordered and installed** to match the new voltages prior to connecting printer to facility power.



Verify the Transformer **IN** value matches the Incoming facility power

Figure 1-11: Example 208v External Transformer with Specifications tag (under wires)



1.13.6 Main Control Panel and Breaker

This section describes the Main control panel and printer main breaker.



Locater	Description
1	Exclusion limit switch*
2	Main AC Breaker
3	Voltage/Power ON indicator LED
4	Push Stop button
5	Emergency stop
6	Jog knob
7	Push Start button
8	Man/Auto Toggle - FabriVU 520 Only

Figure 1-12: Main Control panel

*Danger! For any electrical cabinet equipped with door switches, the electrical maintenance operators must remove, store, and manage the keys used to open the electrical cabinet doors. (1 - Exclusion limit switch).

The operators and mechanical maintenance operators must not have access to the key to override the switches associated with the electrical cabinet doors.

If the electrical cabinet doors are open, the printer is not operating under normal safety conditions. In this case, the operators are not authorized to operate the printer and must contact the electrical maintenance operators to restore printer to normal safety conditions.

1.14 Printer Electrical Schematics

Download the published electrical specifications and provide to a certified electrician to complete the AC Power connections to the printer. Some AC power configurations have <u>Transformer Requirements for Printer Automation Power Supply, page 19</u>.

To ensure the risk of improper electrical configuration is removed or sufficiently reduced, EFI configures all FabriVU printers in the factory with the proper electrical configuration at time of printer shipment, in accordance to the most common incoming voltage used in the country of destination or in accordance with the printer order. However, is mandatory to download the published electrical specifications and provide to a licensed/certified electrician to complete the AC Power connections to the printer.

The licensed/certified electrician must verify the customizations made in the EFI factory are correct, using this document and the information contained in the appropriate Electrical Schematics (see group 00\01\Q03.20). In case of doubt or incorrect electrical configuration, contact EFI prior to beginning any electrical connections.

FabriVU 180 - S/N 660/26 or EARLIER	FabriVU 180 - S/N 660/27 or LATER
https://inkjet.support.efi.com/doc.php?doc=3462	https://inkjet.support.efi.com/doc.php?doc=3835

FabriVU 340 - S/N 670/73 or EARLIER	FabriVU 340 - S/N 670/74 or LATER
https://inkjet.support.efi.com/doc.php?doc=3326	https://inkjet.support.efi.com/doc.php?doc=3834

FabriVU 520 - S/N 680/03 or EARLIER	FabriVU 520 - S/N 680/04 or LATER
https://inkjet.support.efi.com/doc.php?doc=3649	https://inkjet.support.efi.com/doc.php?doc=3833

FabriVU 340i - S/N 671/01 or LATER	
https://inkjet.support.efi.com/doc.php?doc=4377	



1.15 AC Electrical Cabinet Connections - 380v-480v

Provide the electrician with these overviews as well as the Electrical Specifications for AC power connection.

- 1. Perform a Lockout/Tagout on the Main AC Power Connection.
- 2. Connect the main electric cable, L1, L2, L3, to the Smart Line Module, Figure 1-13.
- 3. Connect the ground wire to **PE** ground point.



Figure 1-13: L1, L2, L3 TT/TN Configuration, with PE ground

1.16 Electrical Cabinet - Less than 380v

Follow these guidelines for connecting less than 380v facility power - transformer required.

1. The electronics cabinet contains the transformer mounted to the cabinet floor, Figure 1-14.



Figure 1-14: Transformer configuration

- 2. The Main facility power IN legs connect to the transformer based on the incoming power Phase to Phase values; see Figure 1-14.
- 3. The power OUT legs connect to the Smart Line Module, <u>Figure 1-13</u>, at <u>L1</u>, <u>L2</u>, and <u>L3</u>.
- 4. Proceed to section <u>1.16.1</u>, <u>Printer Computer Power Supply Connection 230v</u>.



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1.16.1 Printer Computer Power Supply Connection - 230v

Follow these guidelines for connecting the printer computer supply for 230v installations. Also see <u>Alternative Printer</u> <u>Computer Power Supply Connection - 120v</u>.

- 1. Connect the two 230v power supply wires to the terminal block, Figure 1-15.
 - Connect **Phase** wire to L230 block position; connect **Neutral** wire to N230 block position.
 - Connect ground to PE printer frame.

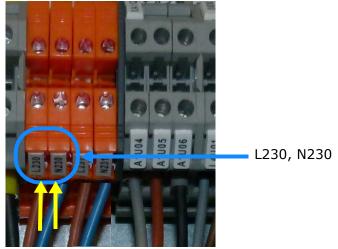
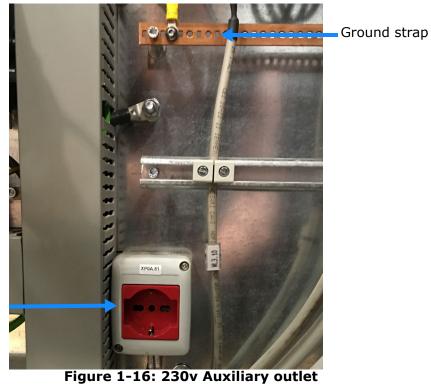


Figure 1-15: 230v power supply



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2. When instructed in the Installation Guide, connect PC power cord to the 230v auxiliary outlet in the electrical cabinet, Figure 1-16, XP0A.51.



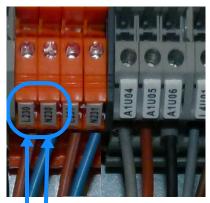
Outlet



1.16.2 Printer Computer Power Supply Connection - 120v

Follow these guidelines for connecting the printer computer supply. Also see <u>Alternative Printer Computer Power Supply</u> <u>Connection - 120v</u> for instruction on using a standard 120v outlet for Printer Computer power supply.

- 1. Connect the two 120v power supply wires to the terminal block, Figure 1-17.
 - Re-label block position L230 as L120; Re-label block position N230 as N120.
 - Connect Phase wire to L120 block position; Connect Neutral wire to N120 block position.
 - Connect ground to PE printer frame.



Important! If this 120v power supply configuration is connected for the printer computer, you **must** re-label these connections as L120 and N120.

Make a notation in the power cabinet informing future users of the power difference.

Re-label the 230v outlet as 120v.

Inform the customer of the power supply change.

Re-label the positions in the Electrical Schematics.

L230, N230 (L120 & N120)

Figure 1-17: 120v power supply

2. When instructed in the Installation Guide, connect PC power cord with **230v plug** to the **existing auxiliary outlet** in the electrical cabinet, <u>Figure 1-16</u>. Remember to re-label this as a 120v outlet.

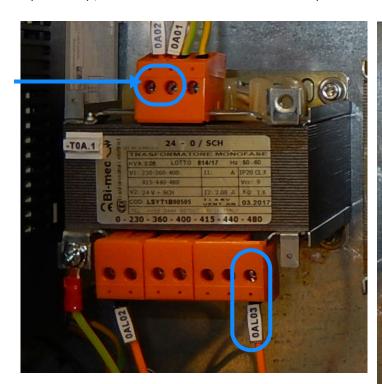


1.16.3 Printer 24VAC Power Supply Wire Positions - Main Power-on Breakers (T0A.1 and T0A.2)

Follow these instructions to set the correct incoming voltage to the 24VAC Transformer for the breakers T0A.1 and T0A.2.

- 1. **T0A.1**: Match **0AL03** wire position (circled in Figure 1-18) to incoming facility voltage. The factory setting is 480v.
- 2. **TOA.2**: Match **OAL09** wire position (circled in Figure 1-18) to incoming facility voltage. The factory setting is 480v.
- 3. After power-up, check the OUTPUT VOLTAGE at points **0A01 and 0A02** is 24v, +/- 5% and **L20 and N20** is 230v, +/- 5%.

OA02/ OA01 test points





L20/N20 test points

Figure 1-18: TOA.1 and TOA.2 Transformers

1.16.3.1 Alternative Printer Computer Power Supply Connection - 120v

Customers can choose to install a standard 120v outlet adjacent to the Printer Computer and utilize a standard 120v power cord, with ground.



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1.17 Compressed Air Requirements

The following table outlines the minimum and recommended compressed air volume requirements.

Table 24: FabriVU Compressed Air Requirements

	FabriVU 180/340/340i/520, Imp.	FabriVU 180/340/340i/520, Metric
MINIMUM Consumption	3.54 cubic feet/min.	100 liters/min.
RECOMMENDED Consumption	4.00 cubic feet/min.	113.3 liters/min.
Pressure	100 psi	7 bar
Dew Point	+37.40 F at working pressure	+30 C at working pressure
Filtration	<25 microns	

For complete Compressed Air specifications, refer to the following document: https://inkjet.support.efi.com/doc.php?doc=975.



1.17.1 Compressed Air Input Location - Legacy Printers

Customer must supply an air source to the printer that meets or exceeds the published clean air requirements.

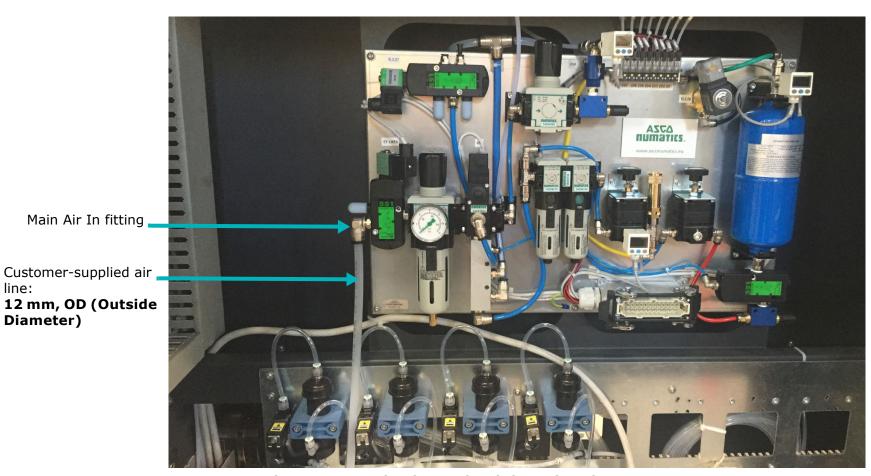


Figure 1-19: Main Air Panel - Air input location

line:

Diameter)



1.17.2 Compressed Air Input Location - Newer Printers

Customer must supply an air source to the printer that meets or exceeds the published clean air requirements.

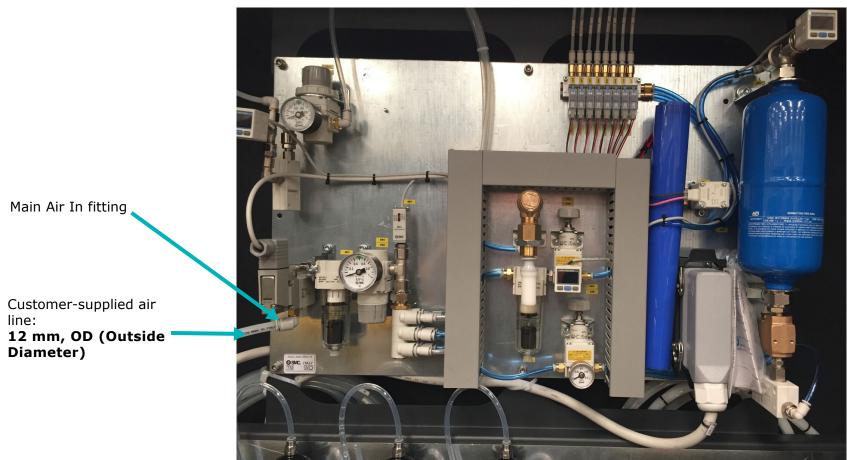


Figure 1-20: Main Air Panel - Air input location, newer printers



1.18 Main Water Input Location

Customer must supply a filtered water line to the printer that meets or exceeds the published FabriVU Filtered Water Requirements, or, understand that Distilled Water must be added manually to the Purging and Wiping trays by the printer operator.

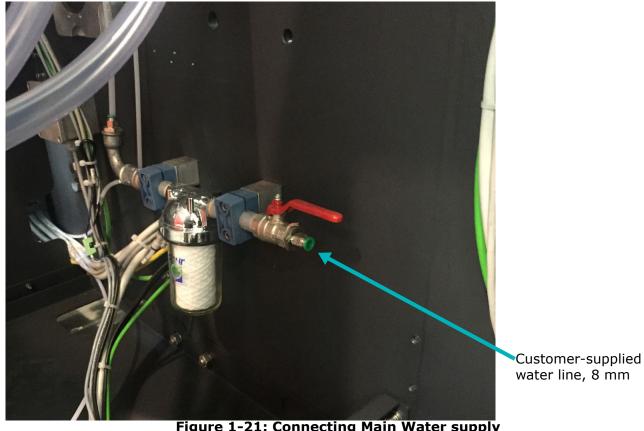


Figure 1-21: Connecting Main Water supply

1.19 Waste Output

Waste water is a product of the print head cleaning process. Configure the waste output to manually drain waste from the Wiping and Purge trays.

1. Locate the waste line OUT fitting, Figure 1-22.

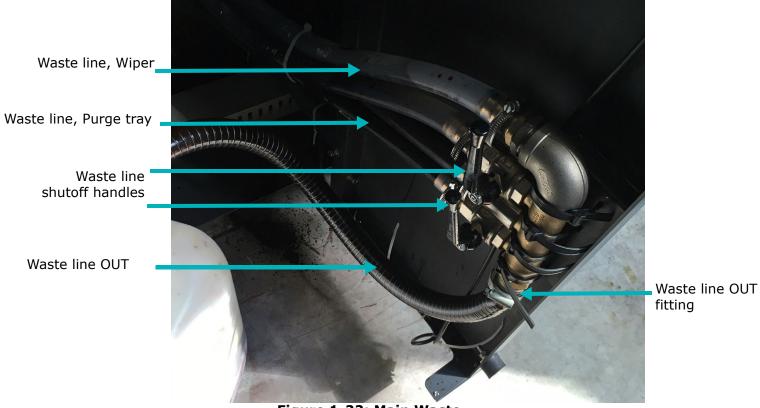


Figure 1-22: Main Waste

- 2. Connect a waste tube to the Waste line OUT fitting.
- 3. Secure line with a hose clamp.

4. Run waste line to empty waste tank, Figure 1-23.



Figure 1-23: Waste line and Waste Tank

1.20 Filtered Water Requirements

Table 25: FabriVU Filtered Water Requirements

	Imp.	Metric
Consumption	1.32 gallons/hour, m.	5.0 L/hour, min.
Pressure	21.75 psi, min.	1.5 bar, max 2.0 bar, min.
Temperature	Min. 68° F, Max, 77° C	Min. 20° C, Max, 25° C



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1.20.1 Additional Filtered Water Requirements

Table 26: FabriVU Filtered Water Requirements

Conductivity	Less than 300 µS/cm at 20°C
pH value	Greater than 6.5 and less than 8.0
Total hardness	Less than 200 ppm CaCO3 Less than 11.2 German Degrees (°D) Less than 20 French Degrees (°F)
Sulfate	Less than 10 ppm S042-
Chloride	Less than 2 ppm CI-
Fluoride	Less than 0.05 ppm F-

Important! If the above specification cannot be determined, the water supply must at minimum be de-mineralized and degassed.

1.21 Environmental

EFI supplies a mist collector to process the air from the print area for 180, 340, and 520 models, and an exhaust extraction unit for 340i models. The mist collector and exhaust extraction units do not require separate ventilation, however, the mist collector contains a drain hose to drain ink and the exhaust extraction unit contains a waste bottle.

Table 27: Environment Requirements

Specification	Imp.	Metric
Ambient room temperature	68° F – 86° F	20° C – 30° C
Relative humidity (non-condensing), print heads only	40% – 60%	
Relative Humidity, transfer paper, printing and storage	40% target	
Dust	Absent	

1.22 Ink Consumption

Ink consumption per hour varies based on several factors: printer model, number of passes, and print job parameters. Use the formula below to calculate the ink consumption based on model and speed.

Max. speed (linear meters) * (print width, in meters) = Total sqm/h * 2.5 g/sqm * 2 (print heads) = Total ink consumption, grams/hour

1.22.1 Example, FabriVU 340

Max speed: 125 linear meter * 3 meters = 375 sqm/h * 2.5 g/sqm * 2 = 1875 gram/h

1.23 Media Specifications - FabriVU 180

Table 28: FabriVU 180

	Imp.	Metric
Media Roll Width minimum	39.37"	100 cm
Media Roll Width maximum	70.86"	180 cm
Media Roll Weight maximum	881 lbs	400 kg
Media Roll maximum diameter	17.75"	45 cm
Inner Media Core	3"	7.62 cm

1.24 Media Specifications - FabriVU 340/340i

Table 29: FabriVU 340/340i

	Imp.	Metric
Media Roll Width minimum	70.86"	180 cm
Media Roll Width maximum	133.85"	340 cm
Media Roll Weight maximum	1,102 lbs	500 kg
Media Roll maximum diameter	13.75"	35 cm
Inner Media Core	3"	7.62 cm

1.25 Media Specifications - FabriVU 520

Table 30: FabriVU 520

	Imp.	Metric
Media Roll Width minimum	118.11"	300 cm
Media Roll Width maximum	203.94"	518 cm
Media Roll Weight maximum	1,543 lbs	700 kg
Media Roll maximum diameter	13.75"	35 cm
Inner Media Core	3"	7.62 cm



1.26 Media Specifications - FabriVU 340i

The FabriVU 340i In-line Sublimation unit uses the same Media Specifications as <u>Table 29</u>:, <u>FabriVU 340/340i</u>, however there are limited supported media types for the printer; refer to <u>Supported Materials</u>. If a material is not listed as Supported, please contact EFI for guidance **before** printing.

1.26.1 Supported Materials

The Current list of tested and approved textiles includes, but is not limited to:

- Pongs Illuminati
- Berger Block-out 4280
- Berger G-Flag
- G&O 7048
- G&O 7096
- G&O 7019 Blockout
- G&O 8019
- Berger Salsa
- G&O 8079

1.26.2 Unsupported Materials

The current list of tested and NON-approved textiles includes, but is not limited to:

- Pongs Creasless Premium
- Pongs Contrast
- G&O 7255 Blockout

1.27 Service Connection Locations and Layouts

This section outlines the Exhaust, Water, Compressed Air, Electrical and two Ethernet cables required. Also see <u>Internet Connection Location - VIPA Service</u> for locations.

1.27.1 FabriVU 180 Service Connections

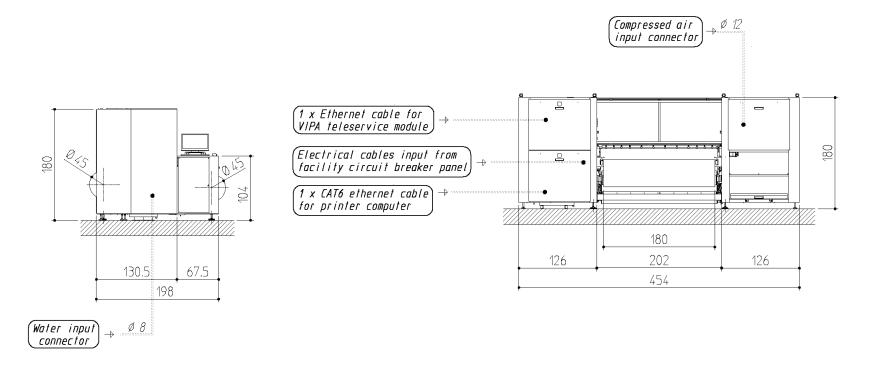


Figure 1-24: FabriVU 180 Service Connection Locations

1.27.2 FabriVU 340/340i Service Connections

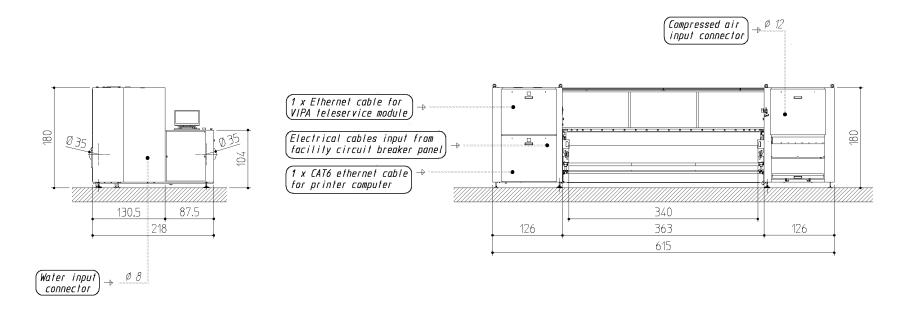


Figure 1-25: FabriVU 340 Service Connection Locations



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1.27.3 FabriVU 520 Service Connections

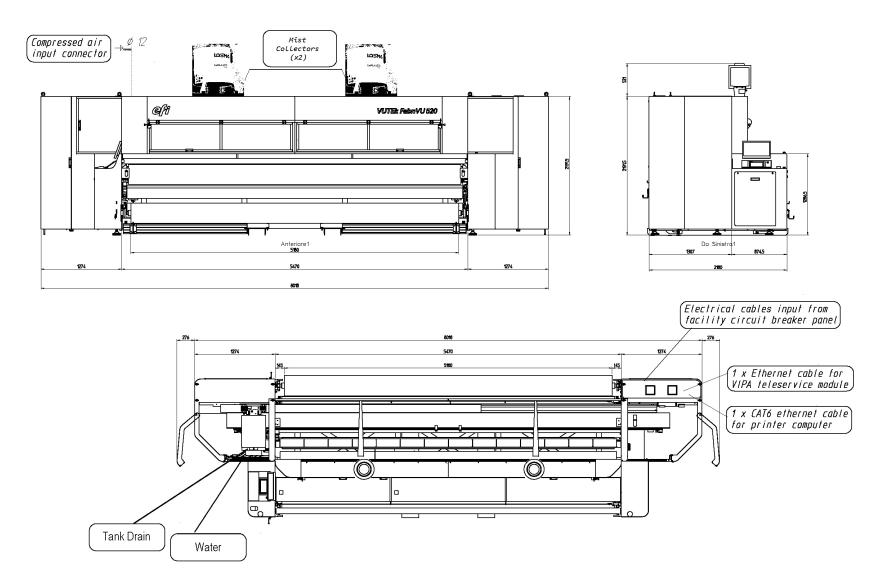


Figure 1-26: FabriVU 520 Service Connection Locations



1.27.4 Internet Connection Location - Printer Computer

An Internet connection is required for the Printer PC located in the Electronics Cabinet. Additional network connections are indicated.



Figure 1-27: Green - Profinet cable to VIPA Service (top left) and Yellow - Internet connection, (bottom right)

1.27.5 Internet Connection Location - VIPA Service



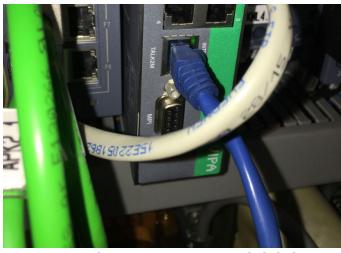


Figure 1-28: VIPA Service, (Left) and Internet connection to TALK2M port (Right)