ATE HSIO CARD CAGE – SITE INSTALL

FOR USE WITH ADVANTEST V93000 CTH AND STH TESTERS

Contents

Overview

This document is used to install the Multilane (ML) High Speed I/O option at the customer site. **The only additional site resource required by ML is the Site Utility Air Supply.** All other resources and connections are made between the Multilane option and the existing V93000 tester cell.

This installation manual assumes the Multilane software and customer test programs are properly installed on the V93000 workstation. You are only installing the hardware with the help of this manual.

Applicable Multilane Documents

1. Site Preparation manual
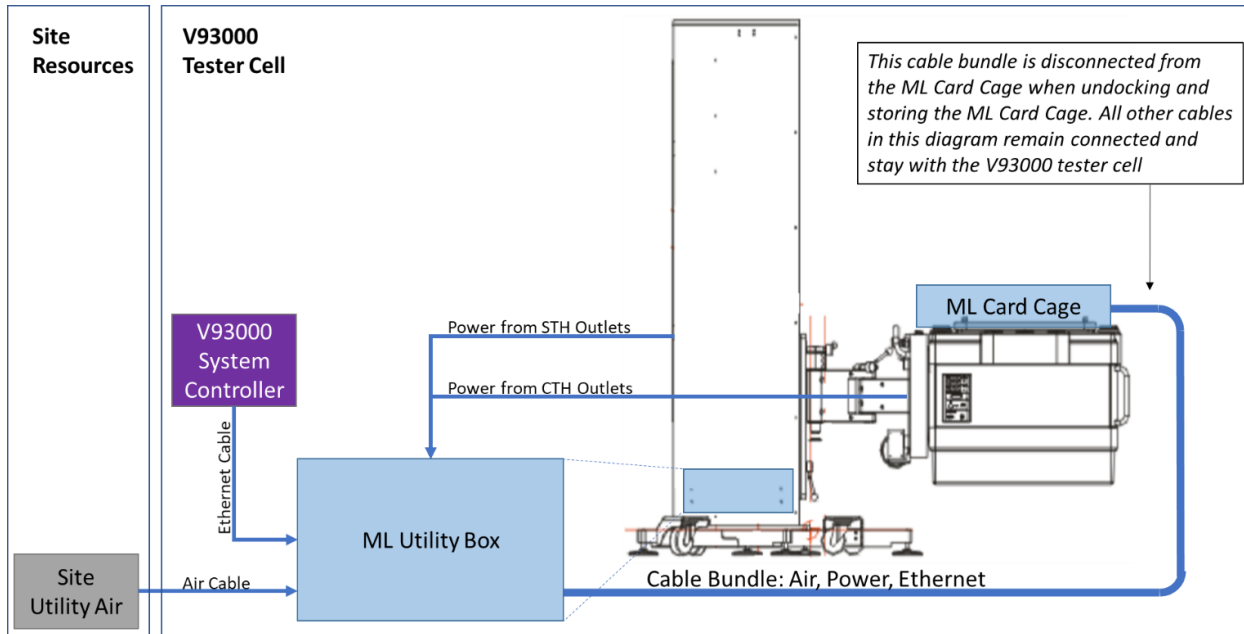2. Utility Box manual
3. System manual
4. Diagnostics manual
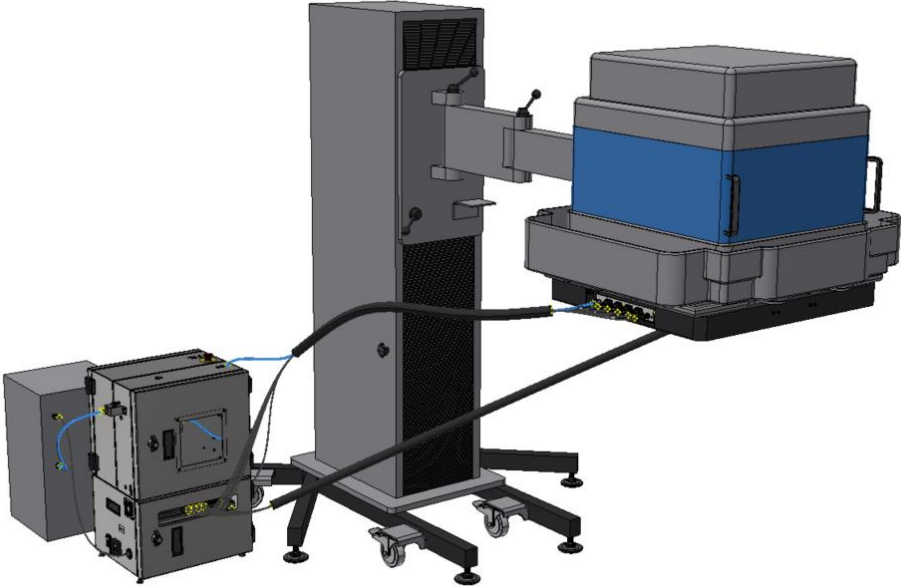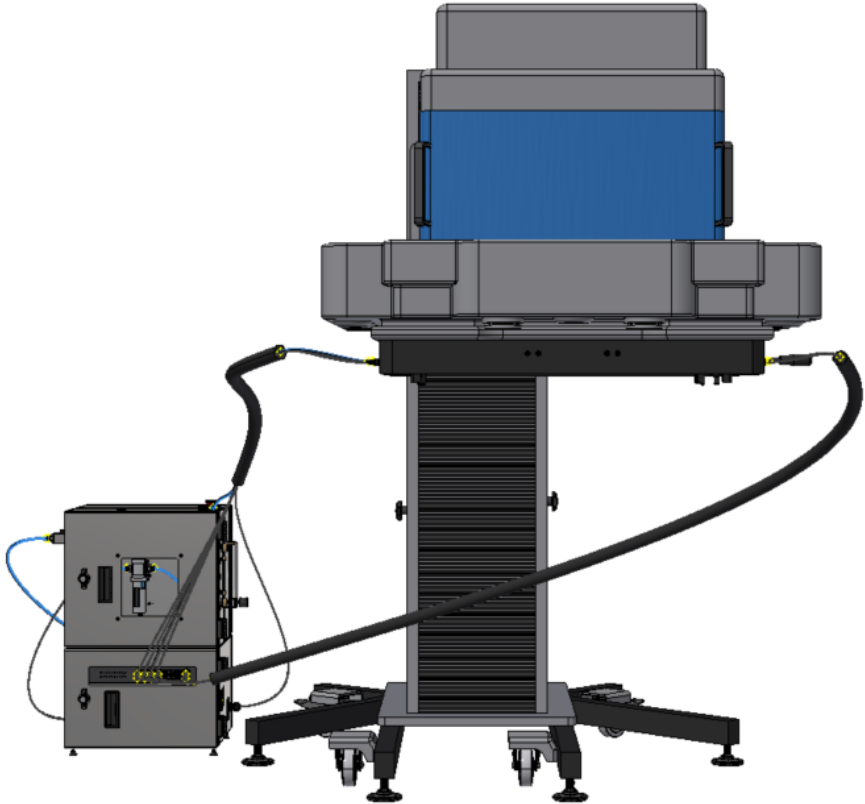
Figure 1: Multilane System Connection Overview

Figure 2: Multilane System with cables between Utility Box and Testhead

Making System Connections

1. Connect "air input" air cable assembly
   a. Connect air cable between site utility air supply and Utility box
   b. Site Utility Air ←→ Air Input in Figure 3: Utility Box Inputs/Outputs.
2. Connect "V93000 power" cable
   a. Connect power cable between STH/CTH location and Utility box power input
   b. If V93000 is STH, then refer to Figure 9: V93000 STH power switched outlets.
   c. If V93000 is CTH, then refer to Figure 8: V93000 CTH power switched outlet.
   d. STH/CTH Power ←→ Power Input in Figure 3: Utility Box Inputs/Outputs.
3. Connect "Workstation Ethernet" cable
   a. Connect Ethernet cable between V93000 workstation and Utility box LAN input
   b. Refer to V93000 manual for ethernet cable connection
   c. V93000 Ethernet ←→ LAN input in Figure 3: Utility Box Inputs/Outputs.
4. Connect "air output" air cable assembly
   a. Open Air door of utility box. Feed air tube into air regulator output and out of top of utility box
   b. Air Cable from utility box ←→ Air Supply Input in Figure 7: Twinning Frame Faceplate.
5. Connect "LAN outputs"
   a. Connect 2 Ethernet cables between the utility box and the twinning frame
   b. Each ethernet cable can plug into either LAN connection
   c. Utility Box LAN outputs ←→ LAN Connections in Figure 7: Twinning Frame Faceplate.
6. Connect "Power output"
   a. Connect power cable between the utility box and the twinning frame
   b. Utility Box Power outputs ←→ +12V Power Input in Figure 7: Twinning Frame Faceplate
7. Tie wrap the cables going between the utility box and twinning frame
   a. Air supply, power cable, ethernet cables

Figure 3: Utility Box Inputs/Outputs

Checking System Connections

1. Check system air
    a. Turn on utility box air. See ballcock valve in Figure 7: Twinning Frame Faceplate.
    b. Using air regulator inside utility box, set CFM to be 3 CFM[1]
    c. Listen for air exiting into Multilane twinning frame
2. Check system power
    a. Turn on V93000 power → Note utility box power input LED is ON
    b. Manually turn on twinning frame power via toggle switch located on utility box → Note utility box +12V power LED is ON
    c. Power toggle switch and power on LED are shown in Figure 4: Utility Box Buttons and LED Indicators
3. Check LAN connection
    a. Note ethernet IP addresses of each Multilane instrument inside the card cage
    b. For each IP address, *PING* the IP address and verify a *PING* response is returned
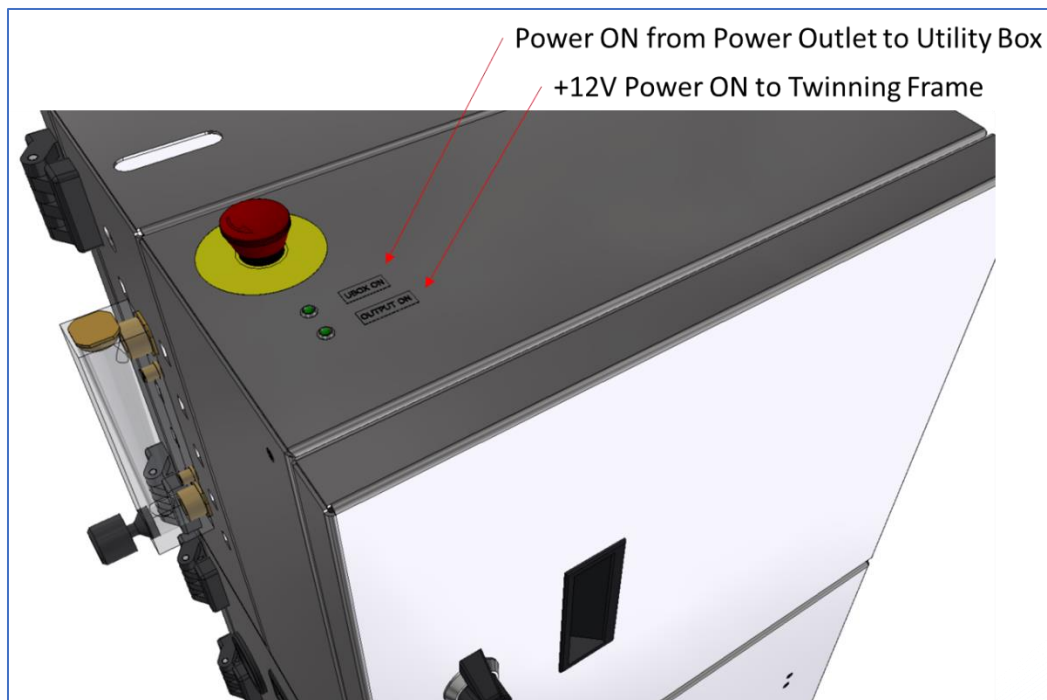4. Run Multilane loopback diagnostics

Power ON from Power Outlet to Utility Box

+12V Power ON to Twinning Frame

Figure 4: Utility Box Buttons and LED Indicators

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[1] Check with Multilane for CFM requirements for customized instruments
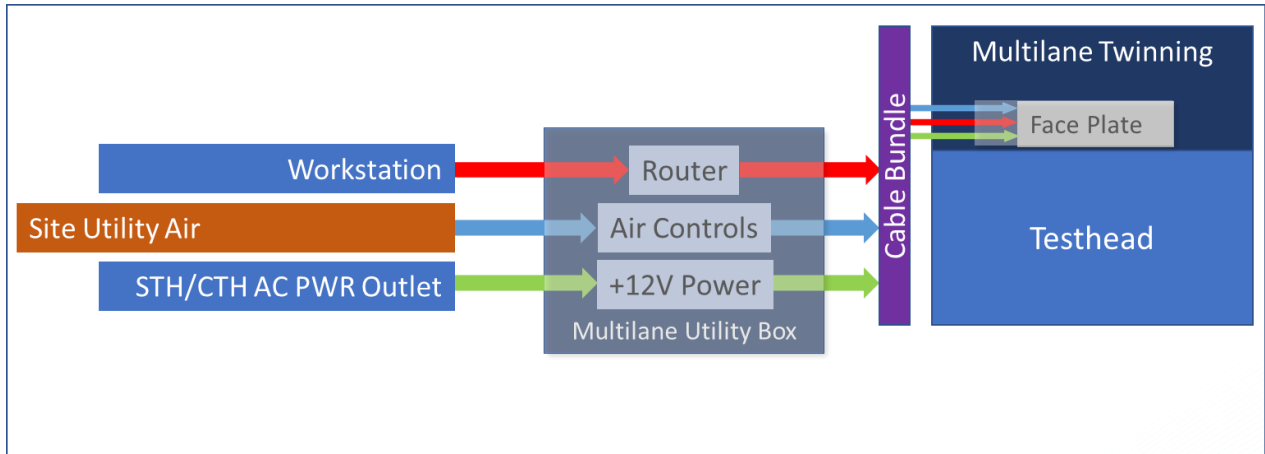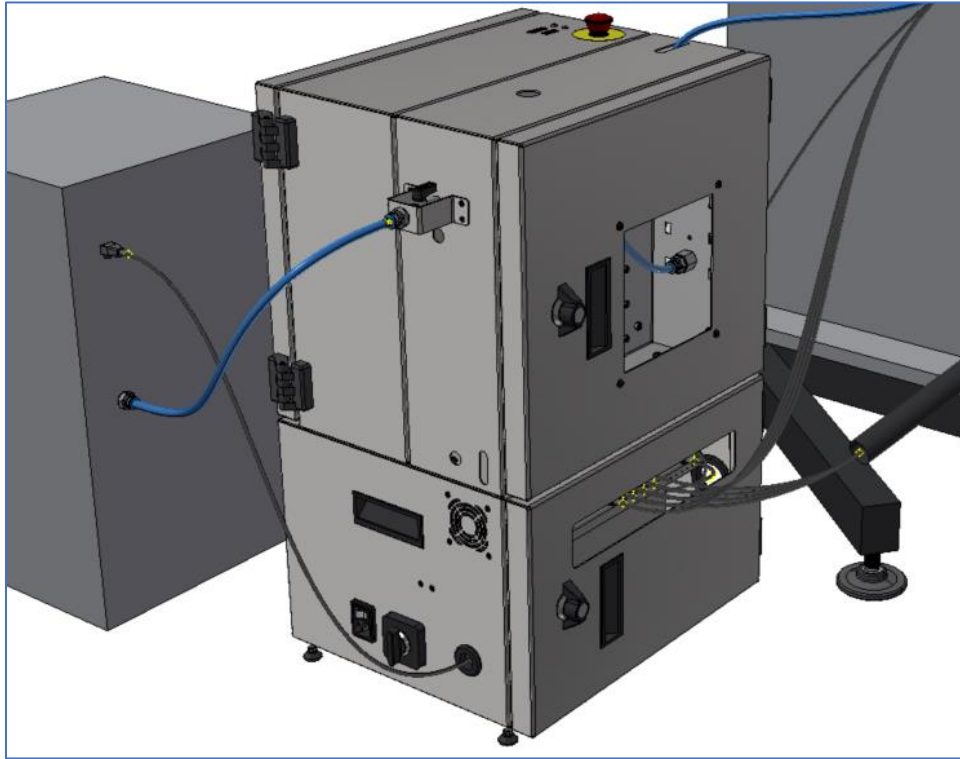
Figure 5: Multilane System Detailed Utility Box Interconnects
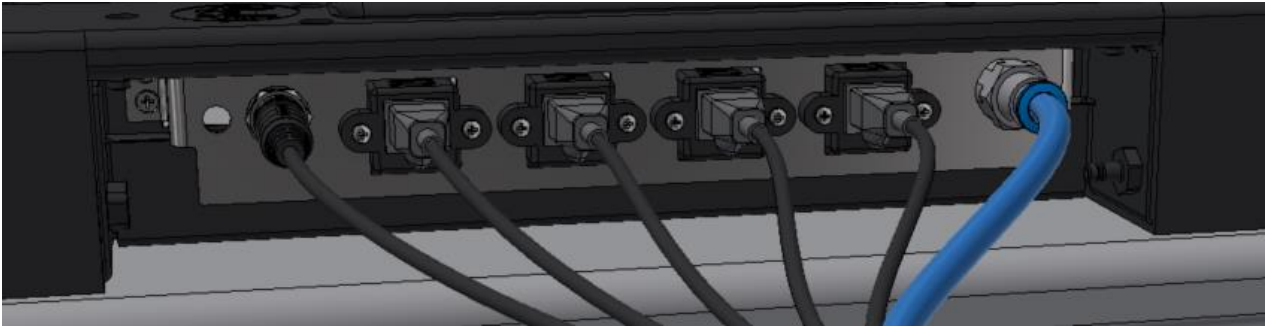
Figure 6: Multilane Card Cage (aka "Twinning Frame")
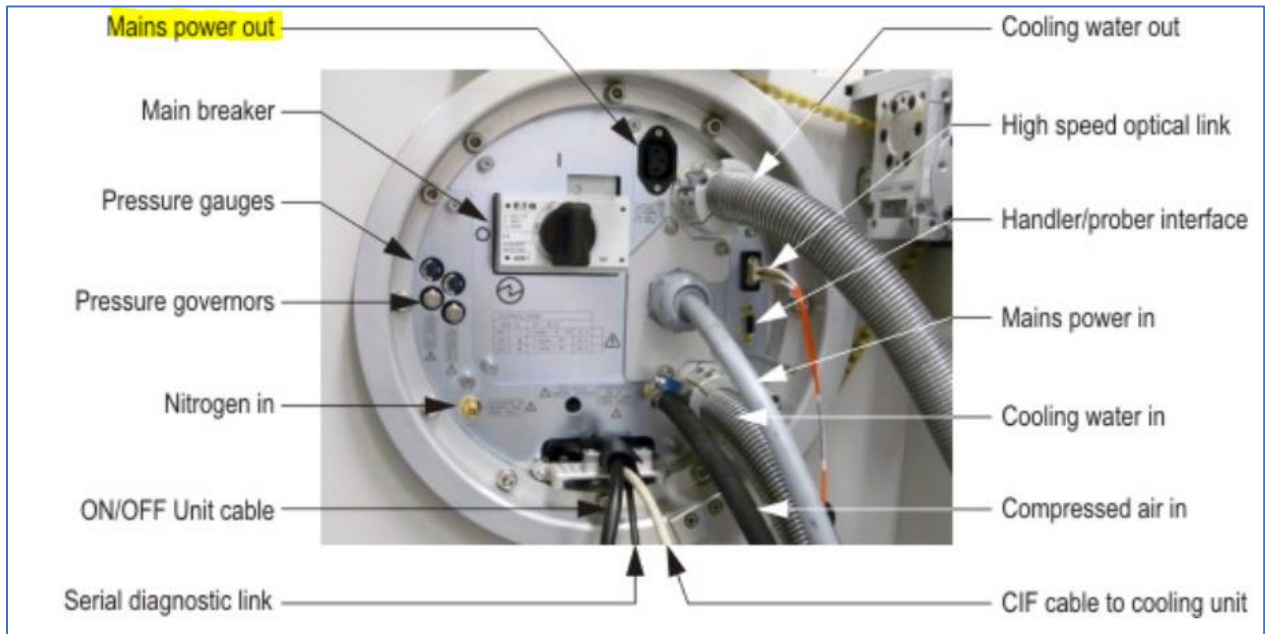

Figure 7: Twinning Frame Faceplate

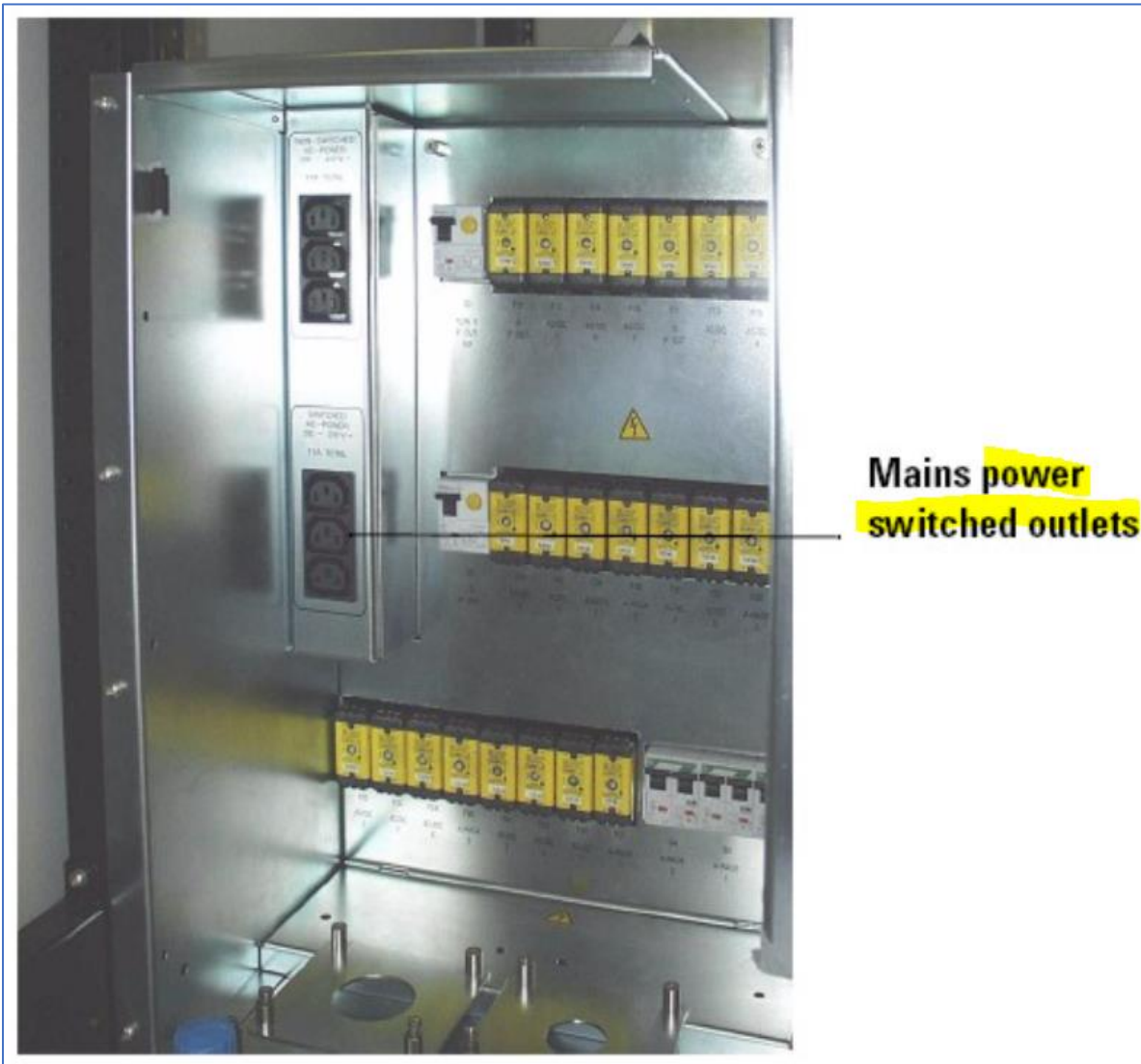*Figure 8: V93000 CTH power switched outlet*

Figure 9: V93000 STH power switched outlets

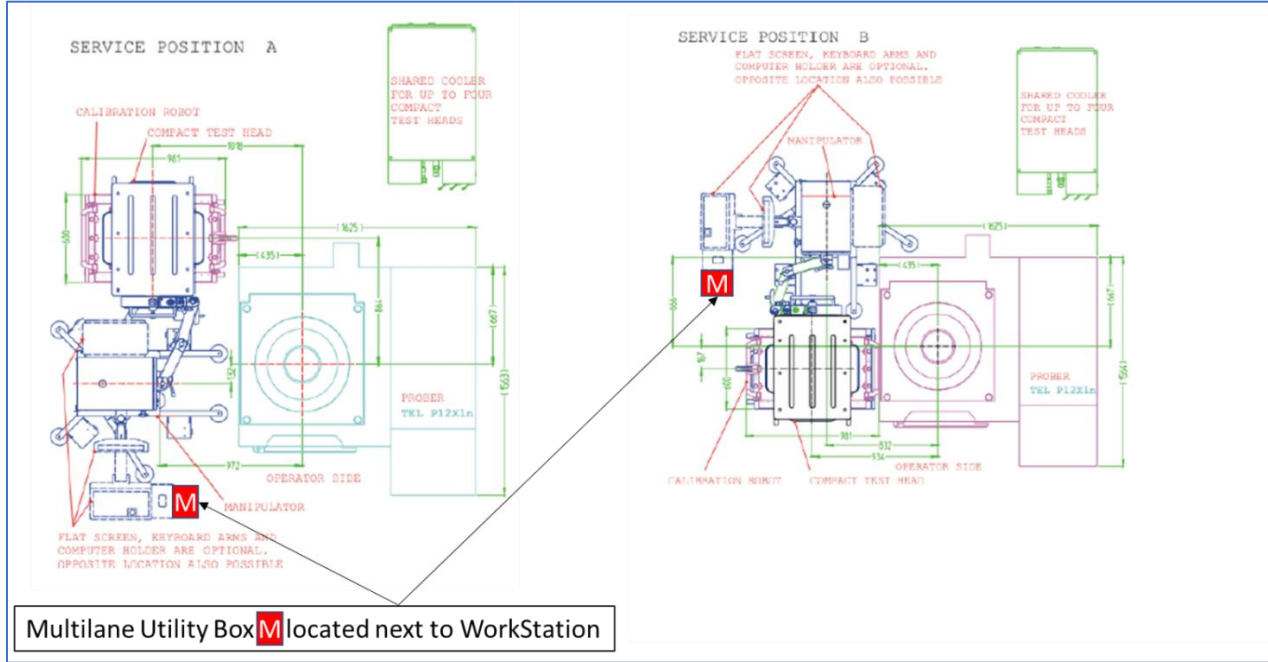## Multilane Recommended Utility Box Site Location

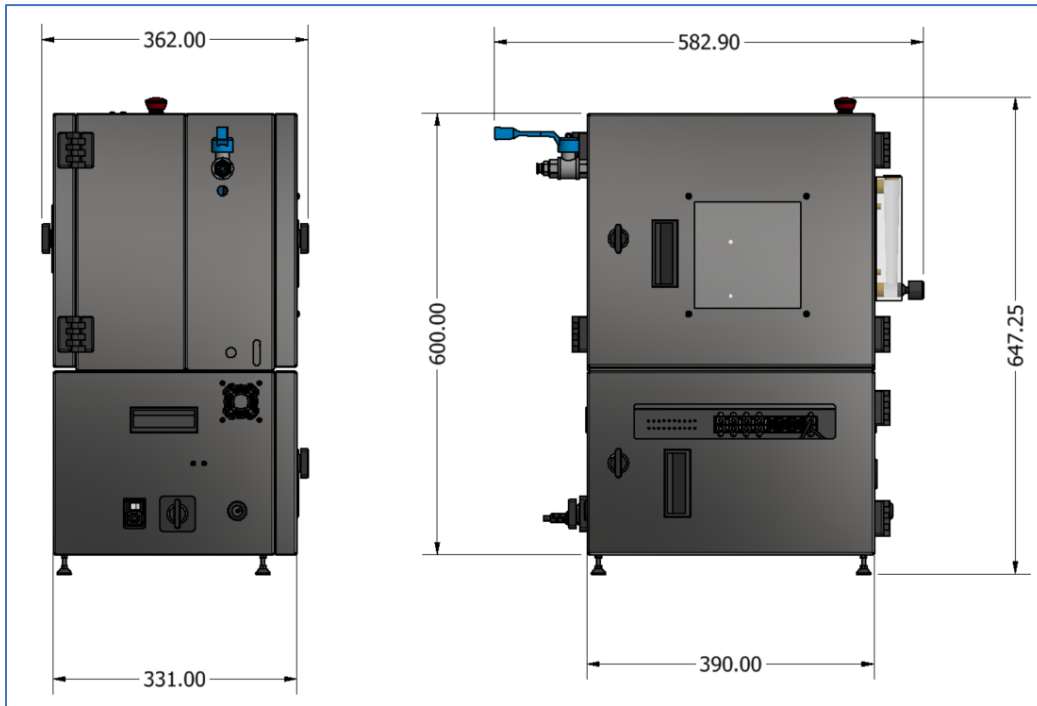*Figure 10: Multilane Utility Box Location*

Figure 11: Multilane Utility Box Dimensions (mm)

MultiLane Regional Locations

North America
48521 Warm Springs Blvd.
Suite 310
Fremont, CA 94539, USA
+1 510 573 6388

Worlwide
Houmal Technology Park
Askarieh Main Road
Houmal, Lebanon
+961 81 794 455

Asia
7th Floor-2, No. 156
Sec. 2, Dongda Road, North District,
Hsinchu City 300, Taiwan (R.O.C.)
+886 3 5744 591

UAE
Building 4WA, Office 420
Dubai Airport Freezone Authority,
Dubai, UAE
+971 4 548 7 547