SCOPE OF INSTALLATION – FIXED INLINE SYSTEMS

This document outlines customer responsibilities and Sensory Analytics responsibilities for the installation of a *SpecMetrix®* Inline System.

ELECTRICAL

Item	Customer Responsibility	Sensory Analytics Responsibility	Requirement
PRIMARY Workstation Display Unit Electrical connection	X		100/240VAC, 50/60Hz, 15Amp dedicated circuit, Single Phase with Neutral, Isolated Double Receptacle for PRIMARY Control Station Display Unit. Environmental temperature: 0-50C (32-122F). (2nd Isolated Double Receptacle if additional Control Station is required)
ICU Electronics Cabinet Electrical connection	X		100/240VAC, 50/60Hz, 15Amp dedicated circuit, Single Phase with Neutral, direct line. To be terminated on the outside by a licensed electrician using the plug provided by Sensory Analytics. Environmental temperature: 0-50C (32-122F)
UPS (Uninterruptible Power Supply)	X		OPTIONAL – If the facility experiences occasional surges/fluctuations in power, Sensory Analytics advises the customer to install a UPS device prior to the PRIMARY WORKSTATION and the ICU. Specifications can be provided upon request
Factory Network	X		Customer to supply minimum CAT6 **Shielded** SSTP cable and shielded connectors from main factory network to ICU or Primary Workstation
Network between SpecMetrix	X (Over 45m (~150ft**)**	X (Under 45m (~150ft**)**	Ethernet cable communication between the ICU and Control Stations is a maximum distance of 45m (~150ft). Any distance longer than that, customer **must** provide fiber KVM's or ethernet must be converted to an armored fiber optic multi-mode.
Optional Component Electrical connections	X		Any additional electrical connections based on the customer design
Review final electrical connections		X	Sensory Analytics technician will review the electrical terminations/receptacles and verify incoming voltages and network connections for all SpecMetrix systems.

*Confirm that shielded ethernet cable is being used for connection by customer between ICU and PC. Installers need to have shielded spare ethernet connectors on hand in case they have been cut off or broke.

MECHANICAL – INSTALLATION

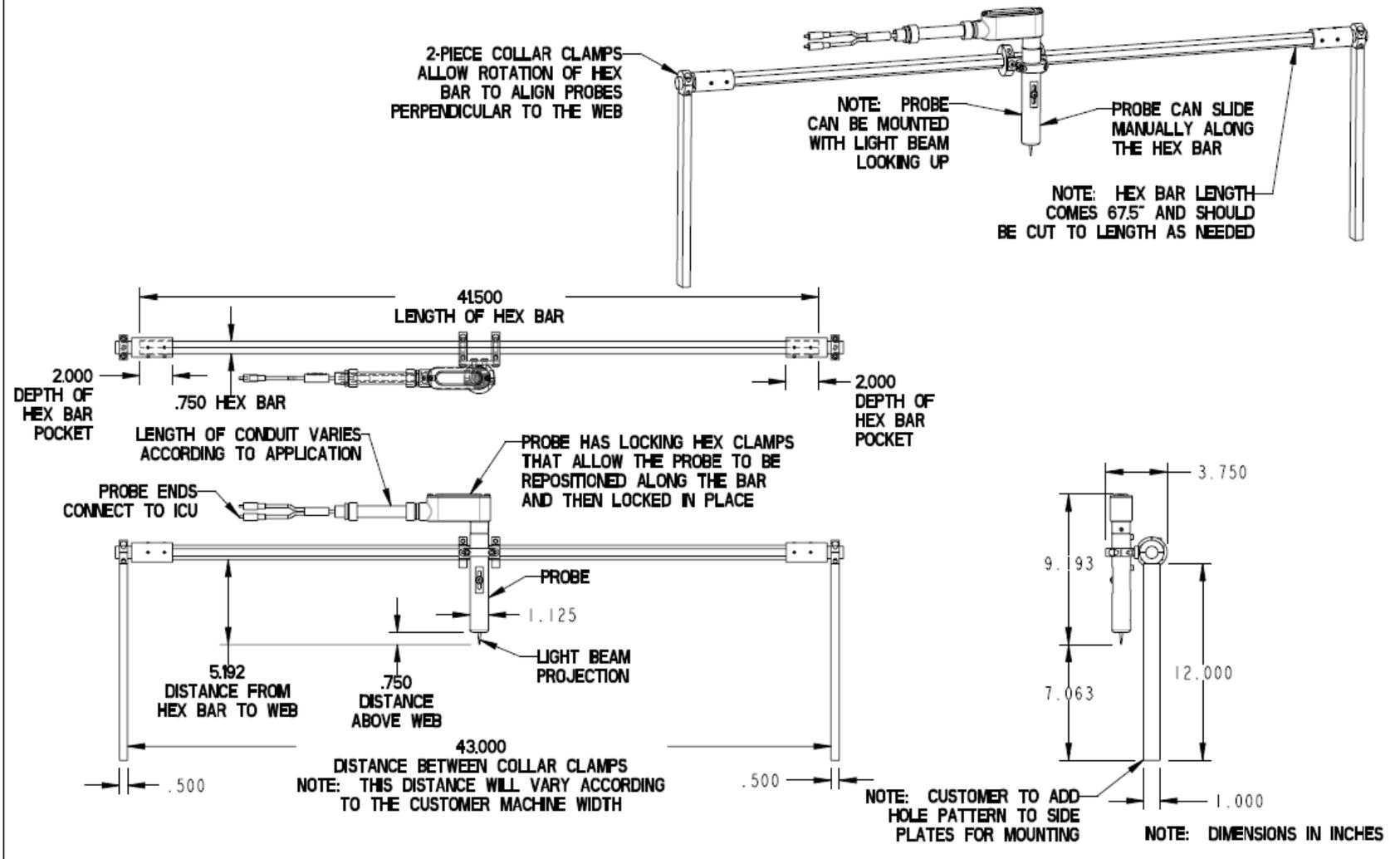| Item	Customer Responsibility	Sensory Analytics Responsibility	Requirement
Provide mounting location for hex bar assembly	X		Customer is responsible for mounting the hex bar assembly to their equipment, or to the ground, based on provided apparatus from Sensory. This includes drilling any holes, providing mounting hardware, revising the design of existing customer equipment, etc.
Mount the hex bar assembly to customer's equipment	X	X	Customer is responsible for cutting the hex bar to the appropriate length. SA technician can assist with final mounting of the hex bar assembly as necessary. Customer can mount the assembly based on the provided assembly drawing and guidelines, prior to installation, to expedite the installation process.
Mount the traversing beam assembly to customer equipment	X	X	SA technician can assist with final mounting of the traversing beam assembly as necessary. Customer can mount the assembly based on the provided assembly drawings and guidelines, prior to installation, to speed up the installation process
Install probe(s)	X	X	SA technician can assist installing probes on the hex bar assembly as necessary. Customer can mount the probes based on the provided assembly drawing.
Mount ICU electronics cabinet	X		Customer will provide a suitable location to mount the ICU cabinet. This should be in a well-ventilated area, away from direct heat or vibration sources. **It must be mounted in a vibration free location to prevent damage to internal components.** **Mounting location must be within a distance that all probe, motor, and edge detection cables can be terminated inside the cabinet**. For example, if 10m probes were included, the ICU should be no farther than 9m from the farthest probe location **based on the actual cable routing route.** Customer is responsible for drilling any holes, providing any mounting brackets, and physically mounting the cabinet. Mounting will be in a location so that there is a minimum 12" of space beneath the cabinet for incoming conduit and power cables, and 12" of space above the cabinet for the indicator light tower
Provide Vibration pads	X		If vibration in the ICU area is constant, the customer will be responsible for providing any type of dampening/vibration pads to ensure it does not affect the ICU cabinet electronics

Item	Customer Responsibility	Sensory Analytics Responsibility	Requirement
Assemble indicator light tower to the ICU		X	SA technician will mount the indicator light tower to the top of the ICU **or the Workstation predetermined by the customer and Sensory Analytics prior to installation**, unless the customer is comfortable doing so prior to installation based on the provided schematics and drawings.
Remote Installation of indicator light tower (OPTIONAL)	X		If the customer requires the light tower to be in a different, remote location away from the ICU, the customer will provide the appropriate length of signal wire to the remote location and will provide mounting junction box.
Connect Probe fiber ends inside ICU cabinet		X	SA technician will make the final probe connections inside the ICU cabinet
Assemble and mount the wall mount assembly for the PRIMARY WORKSTATION Display Unit	X		Customer will drill any holes and mount any brackets to locate and place the wall mount assembly, as required, to position the PRIMARY WORKSTATION Display Unit in a suitable location.
Mount the PRIMARY WORKSTATION Display Unit	X	X	SA technician can assist with final mounting and positioning of the PRIMARY WORKSTATION Display Unit. **PRIMARY WORKSTATION Display Unit must be within 150 ft actual cable routing distance from the ICU.**
Run Ethernet cable to ICU and PRIMARY WORKSTATION locations	X		Customer is responsible for running and terminating **TWO** Cat 6 shielded or higher specification Ethernet cable, between the ICU and PRIMARY WORKSTATION. **Cable will be provided by Sensory Analytics.**
Make final cable connections to ICU and PRIMARY WORKSTATION		X	**Sensory Analytics technician** will make the final Ethernet cable connections inside the ICU and at the PRIMARY WORKSTATION.
Customer Internet Connection to PRIMARY WORKSTATION Display Unit	X		If desired or allowable, customer will provide an Ethernet connection for use with the Intranet and/or Internet. Intranet is required if the customer wishes to use any kind of data communications to/from their network. Internet access is required if the customer wishes to utilize the TeamViewer, **VNC, VPN or any** remote access software program on the PRIMARY WORKSTATION, to allow Sensory Analytics **connect remotely to assist with any questions.**
Mount any additional components	X		Customer is responsible to mount any additional components, as purchased, based on SA drawings and guidelines.

SOFTWARE/OS/COMMUNICATIONS

Item	Customer Responsibility	Sensory Analytics Responsibility	Requirement
Perform any Windows updates		X	If Internet **connection** is established, SA technician will ensure all current Windows updates are installed
Software updates		X	SA technician will verify that the most up-to-date software version is installed at the time of installation.
Data Communication Software	X	X	If the Data Communication package was purchased, the customer is responsible for any programming on THEIR PLC or OPC side. SA is responsible for provided the data integration software license, field name structure, and providing the customer with what needs to be programmed on the customer PLC or OPC side. Once the complete system is installed SA and customer will jointly review to ensure data flow is fully operational.
Set up Network location	X	X	If network is attached, customer will designate a network location for data to be stored. SA technician will point to this path in the software.
Connect and configure tags from Customer PLC into Kepware	X		Customer to establish connection from Customer's PLC into Kepware and set up all the tags needed to communicate. SA will assist as needed.
Set up Windows and Network User logins	X		Customer is responsible for setting up any admin/user privileges on Windows and/or their network. Guidelines for user account access to software to be established with the assistance of SA software integration manager
Install any customer-specific anti-virus or security software	X		Customer is responsible for any additional required programs, as advised by SA software integration manager.
Remote software licenses		X	OPTIONAL: If customer desires a remote desktop version of the SA software for viewing or usage, SA technician will install the appropriate software on the computer. This option requires a minimum of Intranet connection at the PRIMARY WORKSTATION Display Unit.

* Network settings: SpecMetrix ships with all hardware configured with an IP schema of 172.20.1.xxx / 24. If this IP Schema conflicts with any plant network, the plant must make this known during the engineering process.

1 - CHANNEL RUGGEDIZED PROBE LAYOUT DRAWING

2-PIECE COLLAR CLAMPS ALLOW ROTATION OF HEX BAR TO ALIGN PROBES PERPENDICULAR TO THE WEB

NOTE: PROBE CAN BE MOUNTED WITH LIGHT BEAM LOOKING UP

PROBE CAN SLIDE MANUALLY ALONG THE HEX BAR

NOTE: HEX BAR LENGTH COMES 67.5" AND SHOULD BE CUT TO LENGTH AS NEEDED

41.500 LENGTH OF HEX BAR

2.000 DEPTH OF HEX BAR POCKET

.750 HEX BAR

2.000 DEPTH OF HEX BAR POCKET

LENGTH OF CONDUIT VARIES ACCORDING TO APPLICATION

PROBE HAS LOCKING HEX CLAMPS THAT ALLOW THE PROBE TO BE REPOSITIONED ALONG THE BAR AND THEN LOCKED IN PLACE

PROBE ENDS CONNECT TO ICU

3.750

9.193

PROBE

1.125

LIGHT BEAM PROJECTION

5.192 DISTANCE FROM HEX BAR TO WEB

.750 DISTANCE ABOVE WEB

7.063

12.000

43.000 DISTANCE BETWEEN COLLAR CLAMPS NOTE: THIS DISTANCE WILL VARY ACCORDING TO THE CUSTOMER MACHINE WIDTH

.500

.500

NOTE: CUSTOMER TO ADD HOLE PATTERN TO SIDE PLATES FOR MOUNTING

1.000

NOTE: DIMENSIONS IN INCHES

Dimensions are for reference only – See Pre-Engineering Checklist for more detail

SPECMETRIX - MK-V
MOUNTING OPTIONS

1 - PEDISTAL MOUNT WITH YOKE

2 - SWING ARM MOUNT WITH YOKE

3 - WALL MOUNT WITH YOKE

3	25-000479	SpecMetrix MK-V - Wall Mount	I
2	25-000478	SpecMetrix MK-V - Swing Arm Wall	I
I	25-000424	SpecMetrix MK-V - Pedistal Mount	I
Item No.	Part No.	Description	QTY.