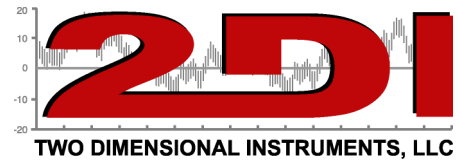


Installation Qualification for OEM



This Installation Qualification documents is for use with the

TV2 Clean Room Monitor

Two Dimensional Instruments, LLC

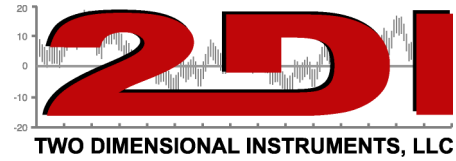
P O Box 159

Crestwood, KY 40014

(502) 243-0042

www.e2di.com

info@e2di.com



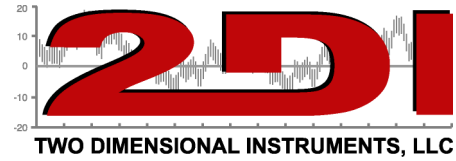
Installation Qualification for OEM

Contents

Installation Qualification

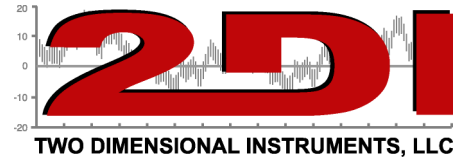
Instrument Origin and Identification	3
Instrument Specification	4
Environment and Site Considerations	5
Instrument Delivery and Documentation	6
Instrument Safety	7
Assembly and Installation	8
Summary Report	9

Installation Qualification for OEM



Instrument Origin and Identification

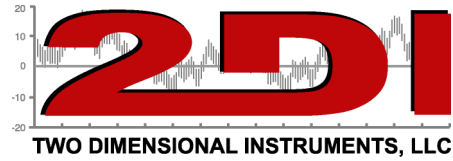
Instrument:	TV2 monitor/logger
Model:	TV2-202ptr (Clean Room Monitor)
Instrument Description:	Clean Room monitor
Manufacturer:	Two Dimensional Instruments, LLC P O Box 159 Crestwood, KY 40014 www.e2di.com
Service Contact:	(877) 241-0042 (502) 243-0042
Serial Number:	
Condition When Received:	New Used Refurbished
Date Received:	
Installed Location:	
Purchase Order Number:	
Identification / Asset Number:	



Installation Qualification for OEM

Instrument Specifications

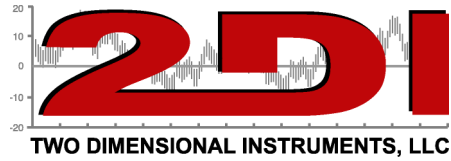
Parameters	Specified Range	Acceptable
Monitor:	Panel mounted with 4 screw posts Power connection – 2 screw terminals External N/O dry contact relay External Wired Ethernet connector for LAN Sensor connections two 4-wire 3.5mm jacks Mini USB socket for computer connection	<input type="checkbox"/>
LCD	Color resistive touch screen 272 x 480 pixels Indicators: Green=OK, Red=power missing LCD size 2.5" x 4.5" Estimated LCD life >5 years	<input type="checkbox"/>
Pressure Sensor:	Differential pressure span: -2"wg to +2"wg (Uncertainty ± 0.007 "wg) Repeatability $\pm 0.5\%$ On screen & alarm resolution 0.01"wg Two ports with 1/8" clear plastic tubes Attachment to monitor - 3.5mm 4-wire jack Maximum distance from monitor 170-feet Plastic enclosure 2" x 2" x 1"	<input type="checkbox"/>
Temperature/RH Sensor:	Temperature Range -20°C to $+ 80^{\circ}\text{C}$ Uncertainty $\pm 0.03^{\circ}\text{C}$ On screen & alarm resolution 0.01°C Wired to monitor - 3.5mm 4 position jack Maximum distance from monitor 170-feet Plastic enclosure 2" x 2" x 1"	<input type="checkbox"/>
	RH Range 0% to 100% Uncertainty $\pm 3.0\%$ Response time 5s On screen & alarm resolution 1.0%	<input type="checkbox"/>
Battery Backup:	1100mAH Internal rechargeable lithium battery Will operate the LCD for > 72 hrs User access – No	<input type="checkbox"/>
Power supply:	Switching power supply ac100-240 50/60hz Output 15vdc .8amps	<input type="checkbox"/>
Shipping weight	2 lbs	<input type="checkbox"/>
Comments:		



Installation Qualification for OEM

Environment and Site Considerations

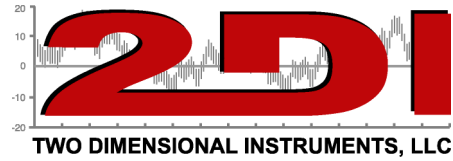
Has the instrument been adequately acclimatized since transport or storage?		
Yes		No
Operating Parameters	Specified Range	Conditions Met
Ambient Conditions	Monitor 0°C to 50°C	<input type="checkbox"/>
	Pressure sensor -5.0"wg to +5.0"wg Operating temperature limit -20°C to 80°C	<input type="checkbox"/>
	Temp/RH sensor	<input type="checkbox"/>
	-20°C to 80°C 0%RH to 99%RH	
Maximum Altitude	2000m (6000')	<input type="checkbox"/>
Supply voltage	230vAC@50/60hZ or 120vAC@50/60hz	<input type="checkbox"/>
Supply Current (amps)	>1 amp	<input type="checkbox"/>
Monitor	Panel mount secured by 4 screw posts	<input type="checkbox"/>
Comments:		



Installation Qualification for OEM

Instrument Deliver and Documentation

Items in Package	Included
Panel Mount Monitor	<input type="checkbox"/>
Pressure Sensor	<input type="checkbox"/>
Temp/RH Sensor	<input type="checkbox"/>
Power supply	<input type="checkbox"/>
USB Cable	<input type="checkbox"/>
Quick Start Guide	<input type="checkbox"/>
Wires for Sensor	<input type="checkbox"/>
Is there any damage to any components of the Clean Room Monitor Yes <input type="checkbox"/> No <input type="checkbox"/>	
If yes: Description of damage: _____ Corrective Action: _____ Manufacturer Informed: Yes <input type="checkbox"/> No <input type="checkbox"/>	
Is standard documentation included:	
	Present Missing
Quick Start Guide (QS)	<input type="checkbox"/> <input type="checkbox"/>
Quick Check Guide (QC)	<input type="checkbox"/> <input type="checkbox"/>
Users Guide and Installation Manual (UG) (Download from www.e2di.com)	<input type="checkbox"/> <input type="checkbox"/>
Has the Users Guide been downloaded from the 2di website? https://www.e2di.com/usersguides.html	<input type="checkbox"/>
Is all additional documentation included?	
	Present Missing Not Requested
Calibration Certificate (CC)	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Installation Qualification (IQ)	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Operation Qualification (OQ)	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Performance Qualification (PQ)	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Comments:	



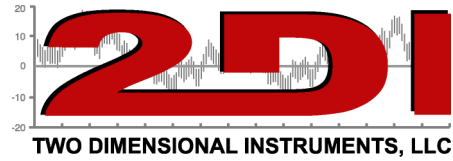
Installation Qualification for OEM

Instrument Safety

Manufacturer's Safety Recommendations:

- Allow enough space for the monitor and sensors
- Position monitor on vertical surface at approximately eye level
- Attach differential pressure sensor to horizontal or vertical surface w Velcro
- Attach temperature/RH sensor to horizontal or vertical surface w Velcro
- Attach power supply wires to the two screw connectors on monitor
- Plug USB cable into power supply or monitor if using a box mount
- Mount pressure sensor tubes on walls of two different rooms
- Run power and sensor wires behind walls
(Note all wires, power and sensor wires carry less than 15vdc and less than 0.8a)

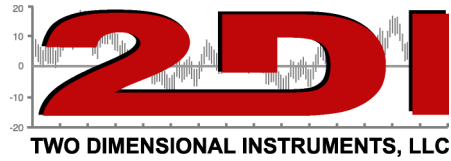
Comments:



Installation Qualification for OEM

Assembly and Installation

Assembled and Installed by: User <input type="checkbox"/> OEM <input type="checkbox"/>			
Installation Procedure:			
	OK	Discrepancy	N/A
Unpack	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Position and mount the Easy-Touch monitor to allow access to the left end panel connections	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Position/mount pressure sensor with Velcro	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Position each of the two clear plastic tube ends in a different area between which differential pressure exists	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Position/mount the temperature/RH sensor with Velcro	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Run between and attach a four-conductor wire to the monitor and each sensor	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Run Cat 5 cable between monitor and an external Ethernet socket for easy user access	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Position USB socket for easy user access and attach wire to monitor	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Run a two-conductor wire between the N/O relay and external alarm if using an external alarm	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Attach two-conductor wire from power supply to monitor	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Plug power supply into wall socket	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Note: Before removing power from the monitor, put it into deep sleep mode			
Comments (including discrepancies):			



Installation Qualification for OEM

Summary Report

Serial Number:

Instrument: Clean Room Monitor	Manufacturer: Two Dimensional Instruments, LLC
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Assessment of Complete Installation Qualification:
 No Deviations Deviations (List below)

Deviation	Impact on Operation	Justification for Acceptance

Successful completion of the preceding activities and checks indicates that this instrument has been satisfactorily delivered and installed. The instrument has passed the Installation Qualification procedure and may now be submitted for operational qualification.

IQ Completed By:		Date:	
Deviations Approved by:		Date:	
IQ Approved by:		Date:	