

Critical Environment Monitoring ...

Made Simple!



Cleanrooms and other critical environments require the maintaining and monitoring of differential air pressure to comply with regulations and ensure safety. The TV2 Cleanroom Monitor does all that and more: It monitors, logs, charts and alarms. It provides ultimate peace of mind by continuously reading differential air pressure, temperature and relative humidity (RH). Users are immediately alerted via email and SMS and local alarms when conditions are not within desired threshold limits. An easy-to-use touchscreen panel makes setup and administration a breeze. The TV2 can be installed with minimal effort in new construction, modular cleanrooms or existing cleanrooms. All conditions are constantly logged to the TV2. The logged data is protected by a 72-hour internal backup battery which continues all functions even when the power is out. Each environmental variable changes color when that condition becomes unfavorable. The wired sensors can be mounted remotely from the monitor. Options include Ethernet, WiFi, BACnet, phone call alerts. Free secure software interfaces with the monitor for remote real time monitoring.

TV2 Monitor - Box mount (Monitoring 2 rooms)

Features & Benefits

- Multi-area monitoring: Monitor temp, RH and differential pressure.
- Compliance: Exceeds ISO14644 requirement for cleanrooms.
- Accessibility: Also monitor remotely from another PC on the same LAN, receive SMS & email alerts for adverse environmental
- Installation: Monitor can be installed and set up without specialized training. Set-up can be completely done on the monitor itself.
- Programming: User-programmable. Touchscreen interface can be locked by admins. Displays color-coded alerts for unsafe conditions.
- **Mounting:** Monitor can be mounted as panel mount (flush to the wall surface), as a box mount on solid core walls with Velcro, or inside the optional heavy-duty industrial instrument case.
- Fees: No ongoing maintenance fees or monthly software service costs. The included software is free for life.
- Traceability: Sensors come with a 2-year NISTtraceable certificate.
- Flexibility: Wired sensors with ample cord length, or wirelessly with 9vdc battery powered wireless sensors.
- **Power:** Power from wall socket ~100 240vac with POE option.

Vertical Markets

Healthcare

Industrial

- Research
- Scientific
- Manufacturing
- For additional product information, instructional videos, **Pharmaceutical** system planning and software usage visit: www.e2di.com

Meets or exceeds the following compliance guidelines and requirements:

ISO14644 • USP <797> USP <800> CDC/VFC **ICAHO**



TV2 Cleanroom Monitor - Planning Your System

1. Mounting Options – First, determine how you will want your control panel to be mounted. There are four (4) options; Box mount in antique white, Panel/flush mount in white or black, and industrial case mount.







Box Mount 7" x 5" x 1.25"

White Panel 10" x 7.5" x 1.25"

Instrument Case 12" x 12" x 4"

2. Sensor Options – Decide where to mount the two sensors. Generally the T/Rh goes in the corner near the ceiling and the pressure sensor mounts over the ceiling the passive ports on the ceiling.





3. Additional accessories – To complete the install, you may decide to add in one of these optional accessories (NOTE: these are not required for functionality, rather to enhance user and installation experience).

Product / Accessory	Description
	50' sensor extension cable for TV2 wired Sensors. 3.5mm slim 4 conductor TRRS male to Female cable Up to (4) can be daisy-chained together achieving a 200' reach from TV2 Monitor.
?	WiFi module
ASÉTRAE BACnet	Add BACnet interface



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Features

TV2 monitor – TV2-204prt

- a. One pressure sensor
- b. One temp/RH sensor
- c. Logs all data locally
- d. 72-hr internal rechargeable battery
- e. Power out, high, low alarms
- f. Text/email alerts for all alarms
- g. Ethernet connection
- h. 120-240 vac
- i. External N/O dry contact relay



Wired Differential Pressure Sensor WDP2

- a. 2-yr NIST traceable certificate
- b. 25-foot connecting wire
- c. Measures 2"x2"x1"
- d. Calibration data stored on sensor
- e. Range ±0.5" wg
- f. Accuracy ±0.007" wg
- g. 24-inch plastic tubes with flush mount ports
- h. 2 passive ports
- i. Calibration Certificate



Wired Temperature/humidity Sensor TSMRH

- a. 2-yr NIST traceable certificate
- b. 25-foot connecting wire
- c. Measures 2"x2"x1"
- d. Calibration data stored on sensor
- e. Range 1% to 99%
- f. Accuracy ±3.0%



MSRP			
TV2-204prt-WD1 (monitor one room)	\$ 1,698.00	TV2-204prt-WD2 (monitor two rooms)	\$ 2,489
Options:			
Panel Mount			89.00
Instrument Cast Mount			129.00
BACnet Option			89.00
WiFi Add-on			89.00
50' Extension Wire for wired Sensor			25.00



Two Dimensional Instruments, LLC

Order Form

ltem	Description	Usage	Price	Qty	Extd
	Cleanroom monitor with wired sensors (one room)				
TV2-204-p	TV2 QuickCheck display, 1 differential pressure sensor, clear tubing, 2 passive ports	Complete solution to monitor differential pressure between (2) areas (wired)	1,398.00		
TV2-204-tr	TV2 QuickCheck display, 1 temperature/RH sensor	Complete solution to monitor temp/RH in one area (wired)	1137.00		
TV2-204-ptr	TV2 wall mount Cleanroom monitor with one temp/rh and one pressure sensor	Complete solution to monitor differential pressure between (2) areas, and temp/RH in (1) area (wired)	1,698.00		
	Cleanroom monitor for two rooms with wired sensors				
TV2-204-prt- wd2	TV2 Cleanroom monitor with 2 pressure and 2 temperature/RH sensors		2,489.00		
Clea	nroom monitor with wired sensors (other configurations)				
TV2-204-p-wd3	TV2 Cleanroom monitor with 3 pressure sensors		1,938.00		
TV2-204-p-wd4	TV2 Cleanroom monitor with 4 pressure sensors		2,208.00		
	Add-ons				
TV2-IC	Instrument case for Panel Mount TV2. Not pre-cut. Conduit and collars not included. Measures 12" x 12" x 4".		129.00		
TV2-WIFI	WiFi connection option for TV2 wired or wireless monitors.		89.00		
WDP2WP	Extra Wall plate for pressure sensor with two clear plastic tubes		35.00		
WPD2	Wired digital differential pressure sensor		270.00		
WiFi	WiFi module		89.00		
TV2-204-PM	Panel Mount display		89.00		
	Sensors				
WDP2	Wired Differential pressure sensor		270.00		
TSMRH2	Wired Temperature/humidity sensor		189.00		