Computer HUB for Multi-Detector Systems

Model Series - FM-9HUB-2, FM-9HUB-10, FM-9HUB-MULTI

Features

- Wall Mount
- Computing Engine for Multiple Instruments and Systems
- Powers Channels for Multiple Instruments: Air, Water, Area, Vehicle, and Personnel
- Continuous, Real-Time, Rugged Duty
- Includes Computer and Color Monitor
- Easy Integration to Facility Mainframe if Desired

Applications

Use in facilities requiring diverse monitor/system applications integrated into a single computer.

Description

The **FM-9HUB** is the computing engine that powers many of TA's multi-channel radiation in air, and water monitors as well as area, vehicular and personnel monitors and systems.

Like all of the **FM-9HUB** series, these are continuous duty, rugged wall or rack mounted systems. Electronics include computer with COLOR LCD Monitor. Electronics are plug-in modules allowing quick change or addition of function as needed; allowing rapid repair by substitution of modules in the field. The modular system is covered by T/A's unique modular warranty, in addition to the full one-year warranty covering all T/A products.

Various systems are based on the **FM-9HUB**. All cabling, connectors, and software in place ready to operate. The standard unit is operated from 115 V single phase, 60 Hz; 220V optional, 50 or 60 Hz.

CBRN
Real - Time
Air & Water
Specialists

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Specifications

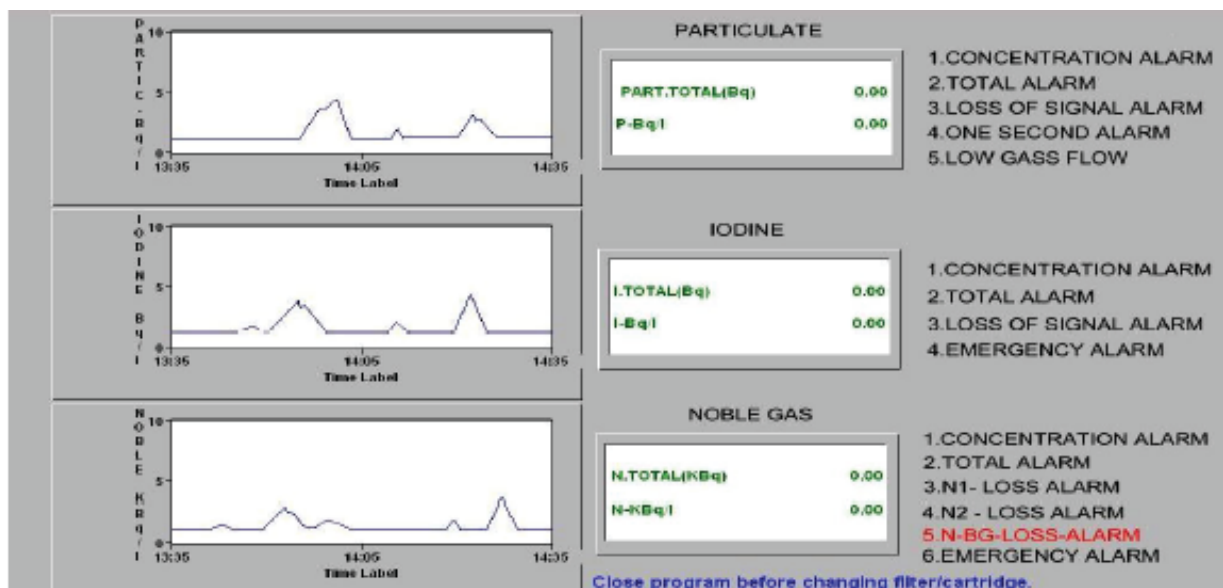|	FM-9HUB-2	FM-9HUB-10	FM-9HUB-MULTI
Channels	Two Channel Monitors	Three to Ten Channel Monitors	More than Ten Channel Monitors
Application ~~~~~~~~~ **Use**	1 – Doorway, Hand, Shoe Monitors 2 – Air Monitors	1 – Water Monitors 2 – Air Monitors 3 – Lab Monitor Networks	1 – Area Monitor Networks 2 – Perimeter Systems
Display	7" Color Monitor	17" Color Monitor	17" Color Monitor

Calibration: Follow on-screen instructions for user-assisted automatic calibration.

Display Mode: Model **FM-9HUB** features an advanced Processor Computer with a Color LCD Monitor. Direct readout in desired radiation units Bq/l or other units such as KBq or Curies, etc.

Operation

Example: When **FM-9HUB-MULTI** continuous air monitor is in normal operation, the Color LCD Monitor displays:

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High Voltage Supply: Separately variable from 0 to 2000. Extremely stable HV.

LCD Color Monitor: Monitor shows both real time concentration and accumulated dose for all channels. Data is shown both graphically and numerically.

Accuracy: +/- 10% except for resolution loss and statistical variation.

Alarms: Alarms are pre-settable by user to any trigger level.

» **Low level Alarm:** Automatic Reset

» **High Level Alarm:** High level alarm remains activated until RESET button is pushed

» **Visual Alarm:** On-screen alarms and warnings. Red-high level, Amber-Low count for each channel

» **Audio Alarm:** 1000 Hz, greater than 80db

Outputs:

1. Logic Level Signals
2. Contact Closure or Opening
3. Ethernet LAN Connection
4. USB ports

Standard Built-in Modules Series – All Solid State

1 ea Digital Acquisition Board

1 ea MGA-5202 with amplifiers including fully adjustable single channel analyzer w/ independent high voltage power supply for scintillation detector

1 ea MV-5-12 Power Supply Module – 5 volt and 12 volt

1 ea Once the high voltage levels are set by the technician, they do not change MAL-Built-in Alarm Module

Electronic System Description

1. CPU with data acquisition
2. High Resolution, LCD Color Monitor Display
3. Use plug-in Mouse
4. Graphic Printer for hard copy on some models
5. USB HUB (4 ports)
6. Use plug-in Keyboard
7. 2 SD Cards, 2 gigabyte per card
8. Non-volatile 1 year data storage. Data is stored every 2 minutes- all year
9. Specialized Overhoff Overview Radiation Monitor software custom tuned and designed for the FM-9HUB
10. Ethernet - LAN and USB ports

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Optional

Special Hardware / Software Upgrades Available *(Not Available On All Models)*

» 4-20mA output signals – 3 channels

» Big 17" Color LCD Monitor

» OVERHOFF Overview Virtual Instrument Software

» Touch-screen feature on the LCD color monitor