COMPUTER HUB
for
Multi-Detector Systems

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

FEATURES:

- 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.

APPLICATION:

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.
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SPECIFICATIONS:

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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:

[Image of monitor displays showing particulate, iodine, and noble gas readings, with labels and time labels.]
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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. Once the high voltage levels are set by the technician, they do not change.
1 ea 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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11. 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