

SAMlink Control Systems

Designing Flexible Solutions

Flexible, Energy Efficient, User Friendly Systems

General Information

SAMlink Control Systems are designed to control *SAM* units from a remote console or panel. Linked individually or in groups, an operator can increase or reduce airflow to a selected area and utilize the set back feature during off-peak hours, resulting in lower operating costs.

Our exclusive state-of-the-art, reasonably priced fan filter control systems utilize our standard 115 volt and 277 volt, motor blower units without using high cost DC motors.

Precise Airflow Control

- *SAM* units are controlled individually or in groups, typically 1-4 units per address.
- Fan speeds are set and/or adjusted from a console located outside the cleanroom without breaching the integrity of the cleanroom. Three levels of adjustment are possible:
 - ... by Individual address
 - ... per Cleanroom zone
 - ... or, Globally (all addresses)
- The number of addresses is almost unlimited.
- Room or equipment layouts with unique airflow requirements are easy to set and control.

Lower Installation Cost

- Installation is seamless and quick. Fewer breaker lines reduce material and electrical contractor costs.
- Reductions in on-site power distribution wiring lower contractor labor cost.
- Installation cost is lower as a result of simplified balancing and adjusting capabilities along with reducing the time required at start-up.
- Reduced certification costs.

Lower Maintenance Costs

• Recalibration and balancing of rooms is simplified.

• Small zone shut-down enables isolated upgrade or maintenance operations to take place without disrupting or affecting the integrity of the cleanroom.

Soft Start Capability

SAMlink Systems with adjustable soft start holds start-up to under 0.8 amperes per 277 Volt *SAM* unit. This results in major cost savings during installation, reducing electrical breaker requirements by as much as 50%.

SAMlink Options

- HEPA or ULPA Filters with 70mm deep pleated design for increased operating efficiency.
- Choose either NCR or CRF Style SAM units.
- Single or multiple *SAM* units per control address with four per address is most common and economical.

SAMlink System



Fig. 1: Assembled SAMlink System in CRI Cleanroom

• Factory wired junction boxes with integral distribution wiring. Substantially reduces on-site electrical work.

A typical *SAMlink* Control System consists of an address or groups of addresses with four or more *SAM* units per address as shown in Fig. 1. Each address is controlled by a panel or wall mounted console as shown in Fig. 2. Each address includes the following components:

- Group of four (4) *SAM* 24 Fan Filter Units consisting of (1) Master Unit and (3) Slave Units.
- Choice of 115 or 277 volt AC impeller type motor blower assembly.
- Control Console, panel or wall mounted.
- With L.E.D. readout and user friendly control features.
- Wiring for each group of four (4) SAM units.
- HEPA or ULPA Filters with 53 mm media pack.



Fig. 2: Touchscreen Console Shown (other consoles available)