USER MANUAL

ATMETER

86 Box Remote FFU Controller
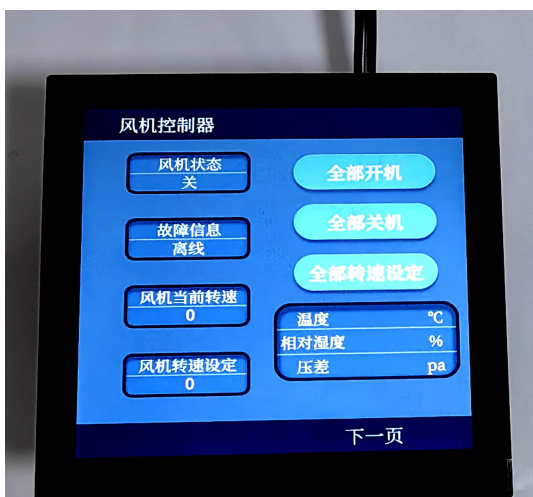
Table of Contents

1. Product Overview

The 86 Box Remote FFU Controller is an intelligent control terminal specially designed for Fan Filter Unit (FFU) systems in cleanrooms. Adopting the standard 86-box installation size, it integrates multiple functions such as status monitoring, centralized control, parameter setting, and fault alarm. It can realize remote centralized management and precise control of multiple FFU fans (up to 50 units), and is suitable for scenarios with high cleanliness requirements such as electronic clean workshops, pharmaceutical cleanrooms, and laboratories.

2. Detailed Explanation of Functional Modules

2.1. Status Monitoring Module

Figure 2-1   Figure 2-2

- **Overall Fan Status:** On the home page, you can quickly view the overall status (on/off), fault information (offline/abnormal), and current speed (rpm) of all FFU fans. Meanwhile, it real-time monitors environmental parameters (temperature in ℃, relative humidity in %, differential pressure in Pa), enabling one-stop mastery of equipment and environmental status.

- **Individual Fan Details**: Supports switching to the detailed page of a single fan to view its device address, real-time speed, set speed, operating status (normal/offline/fault), and corresponding environmental parameters, meeting the needs of refined monitoring.

2.2. Centralized Control Module

Figure 2-3

■ **Batch Operations**: The home page provides "All On", "All Off", and "Unified Speed Setting" functions, allowing one-click batch control of all online FFUs, greatly improving the operational efficiency of the cleanroom system.
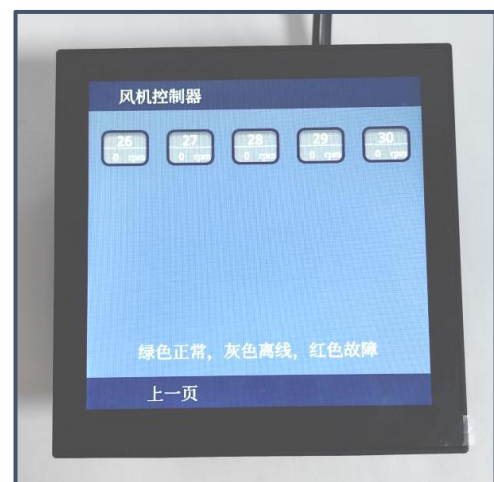

Figure 2-4

Figure 2-5

■ **Pagination Management**: For multiple FFUs (e.g., up to 50 units as shown in Figure 2-4 and Figure 2-5), a paginated display design is adopted. Each page clearly shows the number and speed status of multiple fans. You can quickly switch through "Previous Page" and "Next Page", facilitating the management of large-scale FFU clusters.

2.3. Individual Control Module

■ **Start/Speed Input**: You can individually perform the "Start" operation on the FFU with the specified device address, and set its speed through the numeric keypad (supporting adjustment within the range of 400-1350 rpm), meeting the differentiated wind speed requirements of different cleanliness zones.

■ **Status Feedback**: Real-time feedback of the "Offline", "Normal", and "Fault" statuses of a single FFU (distinguished by gray, green, and red). In case of a fault, the device can be quickly located, shortening the operation and maintenance response time.

3. Product Advantages

■ **Easy Installation**: Adopts the standard 86-box size, which can be directly embedded in the wall of the cleanroom, compatible with the existing decoration style, and the wiring and installation process is simple and efficient.

■ **Intuitive Operation**: Graphical interface design with clear functional divisions. Staff can master operations such as batch control, individual adjustment, and status troubleshooting after simple training.

■ **Intelligent Management**: Reduces manual inspection costs through remote centralized control. Real-time monitoring of environmental and equipment parameters provides data support for the stable operation of the cleanroom, helping to achieve dual optimization of energy saving and cleanliness.

4. Typical Application Scenarios

■ **Electronic Semiconductor Clean Workshops**: Perform zonal speed control of FFUs in multiple areas to balance cleanliness and energy consumption. Meanwhile, real-time monitor environmental differential pressure to ensure the stability of the microenvironment for chip production.

■ **Pharmaceutical GMP Cleanrooms**: Through fault alarm and offline monitoring functions, timely detect FFU abnormalities, avoiding the risk of pharmaceutical production pollution caused by fan faults.

■ **University/Scientific Research Laboratories**: Supports precise speed regulation of individual FFUs, meeting the personalized requirements of different experiments for local cleanliness and improving the reliability of experimental results.

5. Contact Us

5.1. Official Website

Suzhou ATMETER Electronic Technology Co., Ltd.

WWW.ATMETER.COM (Under Construction)

5.2. Customer Service Contact Information

Manager Peng: +86 18606253771