16.12.2024

BULLETIN NO: 44

TESCOM GENERATOR-UPS COMMUNICATION CONTROL INTEGRATION

Product Management Information Bulletin



Summary

Energy management is a fundamental requirement for the uninterrupted operation of industrial processes. The Weintek HMI solution for the DS300T-IS1 Industrial UPS provides a modern interface designed to enable integrated operation of UPS and generator systems. In this newsletter, we will explore how the Weintek HMI effectively integrates with UPS and genset systems and the benefits of this integration.



The DS300T-IS1 Industrial UPS Series is equipped with an integrated management interface for generator and uninterruptible power supply systems using the Weintek MT8072iP2 model HMI. This interface enables efficient and simultaneous management of critical power systems, improving system performance. The developed solution covers important functions such as monitoring, configuration and control of generator and UPS systems.

Weintek Panel, which is used together with industrial UPS, has been developed as a package solution in the automation sector. We are the only company in Turkey to realize the statement "UPS and generator systems can be controlled and monitored from a single point by communicating" that can be added to specifications.

The developed software solution allows the management of the generator and UPS systems from a single centralized control point and provides operators with the following key capabilities that enable them to effectively monitor, configure and send commands to these systems:

- Simultaneous and real-time monitoring of both systems
- Dynamic configuration of system parameters
- Ability to send direct commands to both system

This integrated approach ensures coordinated and effective management of critical power systems while increasing operational efficiency.

1. UPS-GENSET INTEGRATED INTERFACE

The Weintek HMI offers an advanced interface that supports seamless synchronized operation of UPS and generator systems. The developed integrated control platform offers operators:

- Real-Time Monitoring: Instant monitoring of critical systems.
- Dynamic Setting Options: Customizable parameters for different scenarios.
- Quick Command Execution: The ability to intervene in both systems instantly.
- Coordinated Management: Ensures seamless operation between UPS and generator systems.

This solution provides an ideal infrastructure for optimizing energy management strategies, reducing costs, and improving operational performance.

With advanced monitoring and control capabilities, it stands out in the industry, offering a user-friendly interface that requires minimal training for technicians and operators. Its innovative design prevents conflicts in corporate energy management while maximizing performance.

2. MENUS AND FUNCTIONS

These pages provide a comprehensive control interface that enables users to monitor, manage, and configure generator and UPS systems effectively. Each page allows users to observe various system parameters, make adjustments, and intervene instantly.



2.1 MIMIC DIAGRAM

The mimic diagram offers a schematic view of the UPS and generator systems, presenting the overall system status in detail. This section ensures real-time monitoring of critical system information and employs color-coded representations of electrical flow and interactive components, allowing users to access information effortlessly.



2.2 UPS MAIN MENU

The UPS Main Menu allows users to easily view and manage essential system information and settings. This section includes the following features:

- Input-Output Measurements: Detailed display of voltage, current, and frequency data for the UPS system.
- Inverter/Bypass/Temperature Measurements: Comprehensive screens to monitor UPS performance and environmental conditions.
- Warnings and Alarms: A comprehensive system to notify users of situations requiring immediate attention.
- Settings: Access to menus for language changes, brightness adjustments, service options, and more.





2.3 GENERATOR MAIN MENU

The Generator Main Menu provides an interface to easily monitor the generator's performance and status. This section includes the following features:



- General and Power Measurements: Displays electrical differences between the generator and grid sources.
- Mode Selection: Enables easy switching between automatic, manual, and test modes.
- **Parameter Monitoring:** Tracks critical information such as temperature, oil pressure, and frequency.

3. BENEFITS OF INTEGRATION

This integration enables the efficient management of generator and UPS systems, offering numerous advantages to businesses. Below are the key benefits of this integrated management solution:

- Centralized Control: Allows operators to manage generator and UPS systems from a single interface.
- User-Friendly Design: Simple and intuitive screen layout minimizes training requirements.
- Operational Efficiency: Accelerates operations through synchronized management of all critical components.
- Real-Time Performance Monitoring: Facilitates faster operational decision-making.
- Reducing Error Risk: Early warning and alarm systems facilitate intervention to problems.
- Energy Efficiency: Optimized system settings reduce energy costs.
- High Reliability: Ensures uninterrupted operation of critical power systems.
- Cost Savings: Reduces operational costs through lower maintenance needs and energy optimization.

4. CONCLUSION

The DS300T-IS1 Industrial UPS with the Weintek HMI solution is a comprehensive solution that enables effective monitoring and management of UPS and generator systems. It helps ensure an uninterrupted energy flow in industrial facilities while enhancing user experience and system efficiency.

This solution is an ideal choice for any industrial application aiming to increase reliability and performance in energy management.



Kindly submitted for your information,

Product Management

