Info Sheet

LV Synchronization Control System

Reliable backup and load management at the low voltage level.

1. Overview

IPU SA's **LV Synchronization Control Systems** are engineered to manage backup generator synchronization and power switching in critical low-voltage (LV) applications.
These panels enable seamless control, automatic or manual switching, and load balancing — ensuring uninterrupted power during mains failure and maximizing operational reliability.

Ideal for commercial facilities, industrial operations, and infrastructure requiring **gen-set coordination**, **load sharing**, and **redundant control**, our systems are compliant with both **project-specific specs** and **international standards**.

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2. Key Features

- Automatic or manual synchronization
- Load sharing & load shedding logic
- Backup and prime power modes
- Mains fail detection & smooth transfer
- Duty/standby switching
- Data archiving & remote access
- Built-in protection functions
- Integration with SCADA/PLC systems
- Support for third-party MV switchgear and generator ECUs
- Redundant controller support (optional)

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3. Applications

- Data centers
- Hospitals
- Water treatment plants
- Industrial production sites
- Government buildings
- Airports and logistics hubs

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4. Integration Capabilities

- Supports Modbus, analog, and digital I/O interfaces
- Compatible with major generator ECU/speed governor systems
- Interfaces easily with IPU SA's **SCADA**, **MCCs**, and **load management systems**

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5. Certifications & Standards

- Built to IEC 61439
- Custom-built to meet the project specification, client's sequence of operation, and control matrix (Designed and tested as per the OEM technical guidelines and standards)
- OEM component compatibility (e.g., Schneider, ComAp, ABB)