

Lineage Total Power Solution (LTPS)

Introduction

Lineage Total Power Solution is a standalone IP55 outdoor enclosure with an AC, DC Power distribution and management system with built-in intelligence to optimize the usage of mains and DG, which will enable substantial reduction in OPEX. The product is highly efficient and easily serviceable. It works on 3 ϕ /2 ϕ /1 ϕ input depending up on the line conditions. In the absence of AC mains the DC power will be fed by the battery. This hybrid system provides unique features such as remote monitoring and control of DG, fuel level monitoring, Temperature & Humidity Monitoring, Access control, Inventory data management, air-conditioner control, free cooling operations which will be added advantage to optimize the site running cost. The Lineage TPS is designed for Telecom use, achieving high telecom standards, and providing great flexibility and expandability. This system will simplify the telecom power plant installation and maintenance while saving on fuel when operated in a hybrid (charge/discharge mode).

Features

- IP55 Double Skin Outdoor cabinet with $\Delta T < 10^{\circ}\text{C}$ – Fan cooled
- Operating Temperature -10°C to 50°C
- 48V DC power 12kW/18kW/24kW options
- Space for 18U, 19" for Tx Equipment
- Space for accommodating Battery (1 x 600Ah VRLA or 3 x 276Ah Durathon with Battery stand)
- Maximum Mains power utilization using Lineage Power[®] ASLI[™] technology, works from **3 ϕ** or **2 ϕ** or even **1 ϕ** input
- 3 ϕ /1 ϕ DG interface with DG battery charger
- Integrated AC Distribution Panel for various loads (can be customized)
- System Level Surge Protection - Class C (20kA, 8/20 μs , 1.5kV Up)
- Up to 4 operator Load distribution (customizable)
- Display of Mains and DG parameters
- GPRS modem for remote transmission of data to remote server
- Event Log for last 1000 events with date & time stamp
- RS232 port for programming the controller parameters
- Integrated Aviation lamp controller, Fire/smoke Alarm
- IP65 Cable Glands for Cable Entry Holes
- Single Compact Cabinet 1.8m (W) x 1.0m (D) x 2.0m (H)

Optional features

- Enhanced Surge Protection at Entry Level - Class B (25kA, 10/350 μs , 1.5kV Up) in IP55 Enclosure
- Remote Locking system with Mechanical key override
- Fuel Level monitoring
- Inventory management using RF ID tags
- Video monitoring system using Camera
- Door access via Remote command (GPRS)
- Web based data monitoring
- Email and SMS alert for alarm
- DC DG interface hardware for Integration in the DC bus

- SVR options: 4kVA with wide input voltage (90Vac to 300Vac) connected external to cabinet
- Fire extinguisher mounting provision
- DC Air conditioner Mounting Provision for Battery Space

Applications

- Outdoor Telecom Sites



Benefits:

- Lower OPEX cost
- Suitable for poor grid conditions
- Suitable for Outdoor sites
- Optimized DG operation

Measurements

- Mains
 - ✓ 3Ø Voltage, Current, Power and Energy consumption and Run hours
- DG
 - ✓ 3Ø /1Ø Voltage, Current, Power and Energy consumption and Run hours
 - ✓ Fuel indicator
- Battery Voltage, battery current and run hours
- Temperature
- Humidity

Monitoring and control

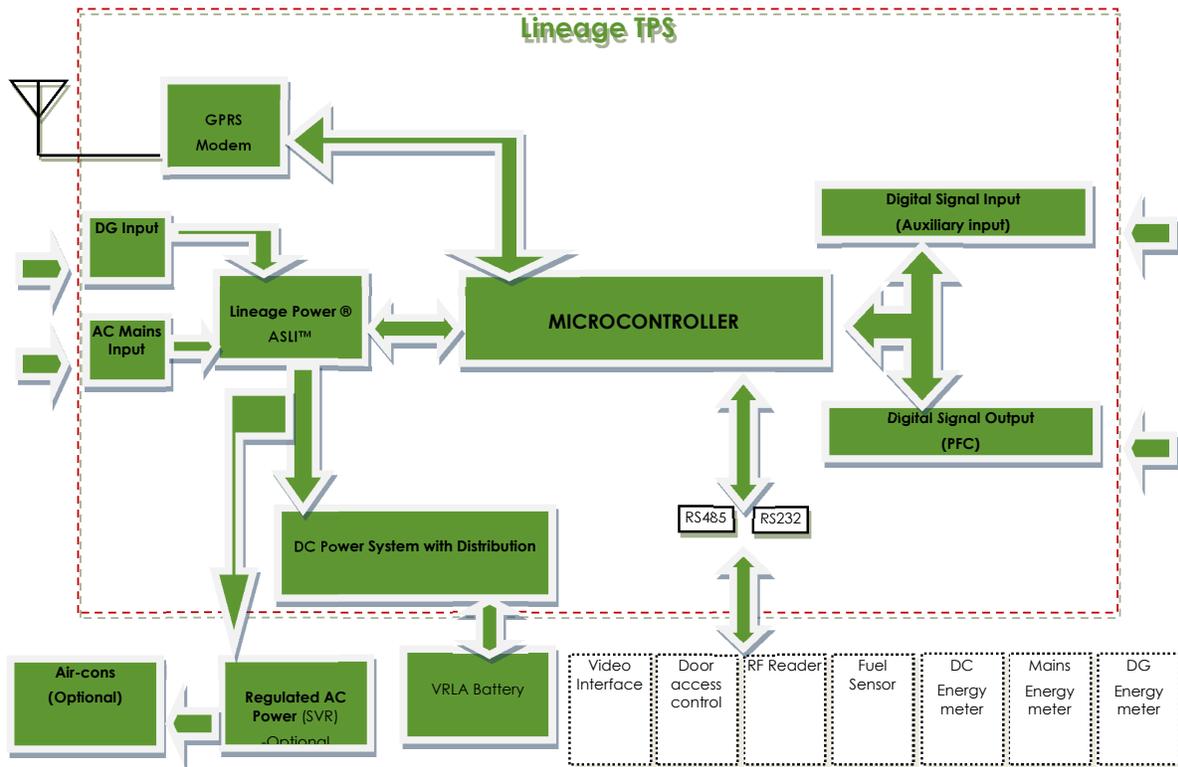
- DG ON/OFF (optional)
- Shelter and DG canopy temperature setting
- Real-time monitoring of DG Fuel levels
- Door access control (ON/OFF)

- RF tag readers

Reports

- Energy consumption
 - ✓ AC Mains, DG, Operator wise DC energy
- Run Hours, Daily/Monthly
 - ✓ AC Mains, DG, Battery, Air-conditioner, Free cooling unit
- Real time fuel consumption
- Battery charge and discharge cycle hour counter and depth of discharge
- Alarm management and report
- Routine maintenance alerts and reports
- Inventory/asset management report

Simplified Layout Diagram



With our wide range of product offerings along with extensive application notes, development tools, pre and post-sales support including technical support, Lineage Power can provide a total solution to your current and future powering needs.

For further information please write to us: Sales@lineagepowersystems.com

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