Case Study

SunGiga

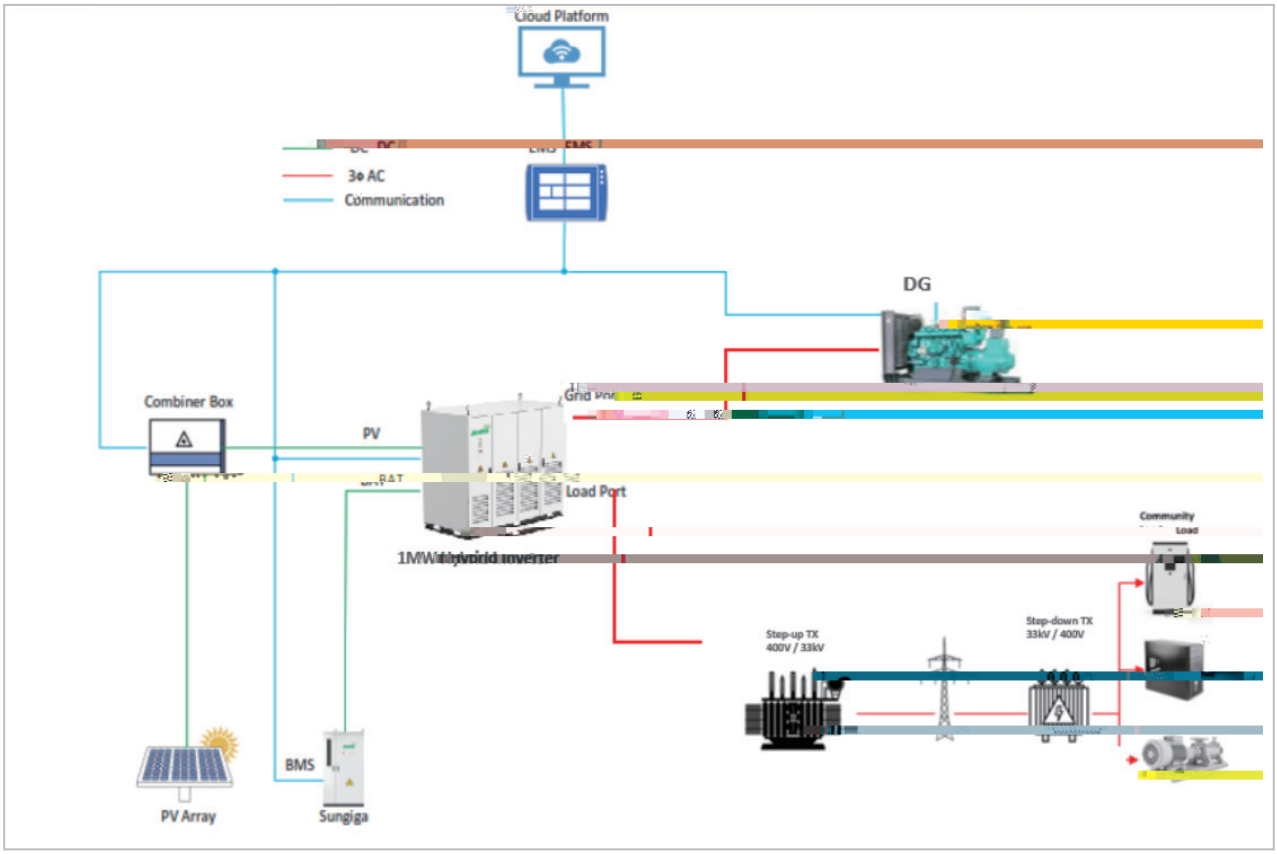
1MW/2.15MWh 锂电储能系统项目——刚果（金）马科罗微电网

DC-coupled Energy Storage System

DG

1MWp

1MW/2.15MWh ESS



1.

BMS

CAN BMS

PCS

BMU BCU

BMU

2.15MWh

BCU HVB

10

BMU

BMS PCS EMS

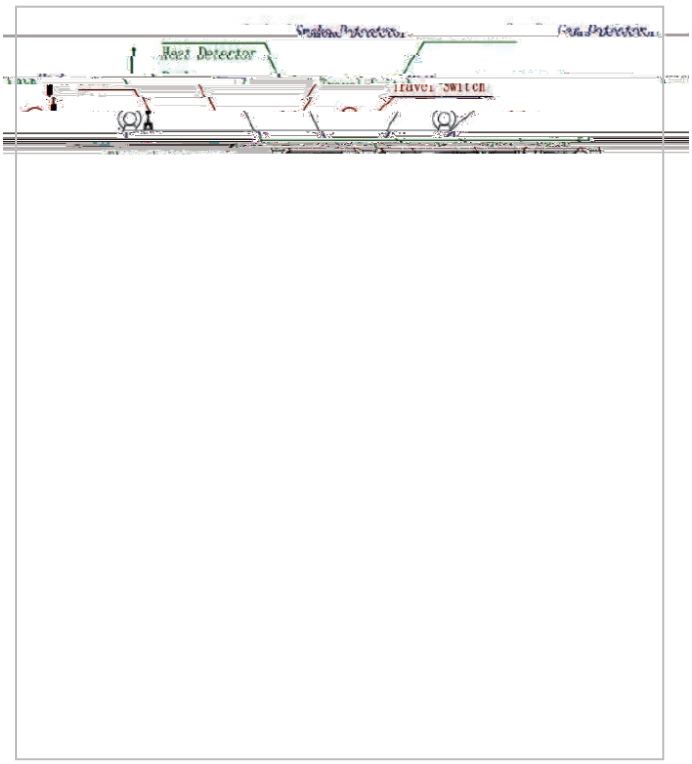
BMU

SOC SOH

215kWh 5 153.6V BMS

768V HVB

BCU



PCS

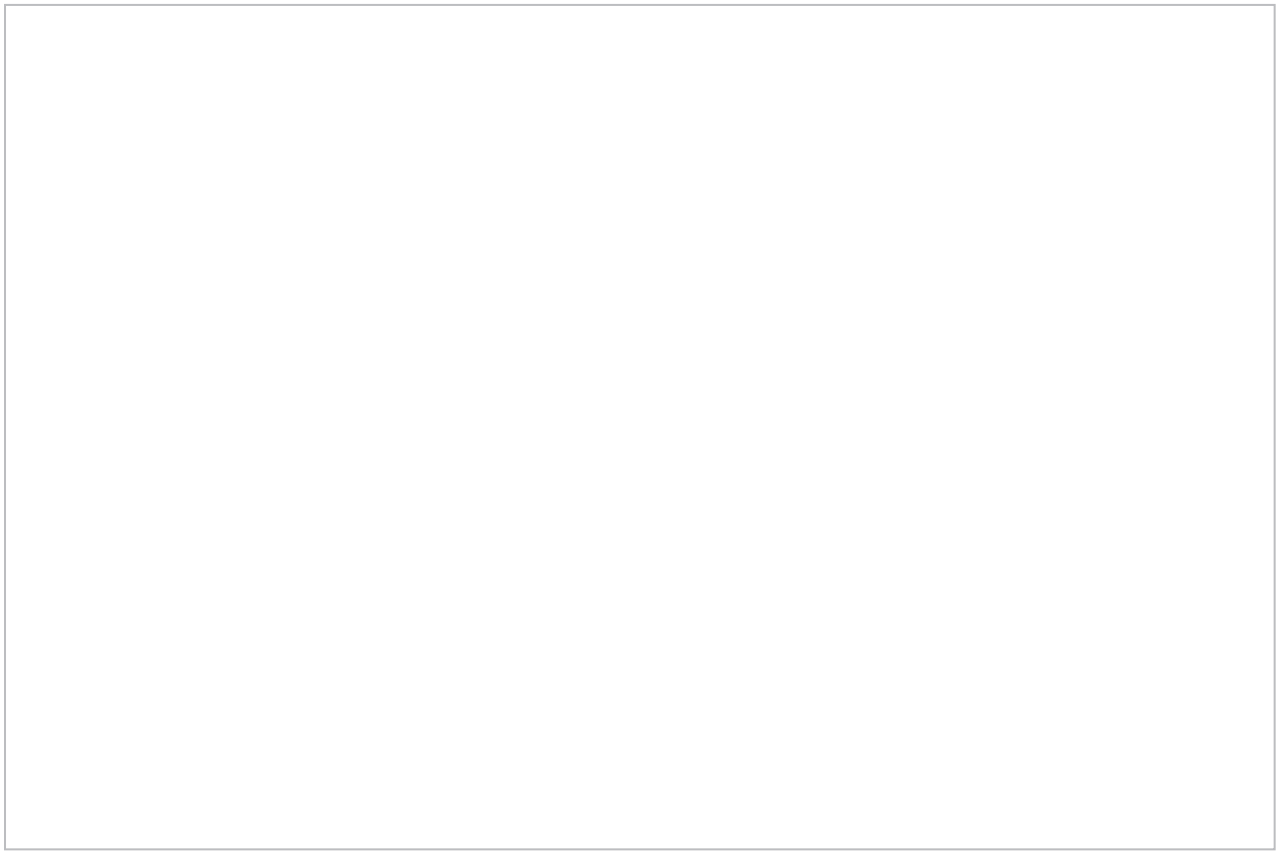
500kW 1MW PCS

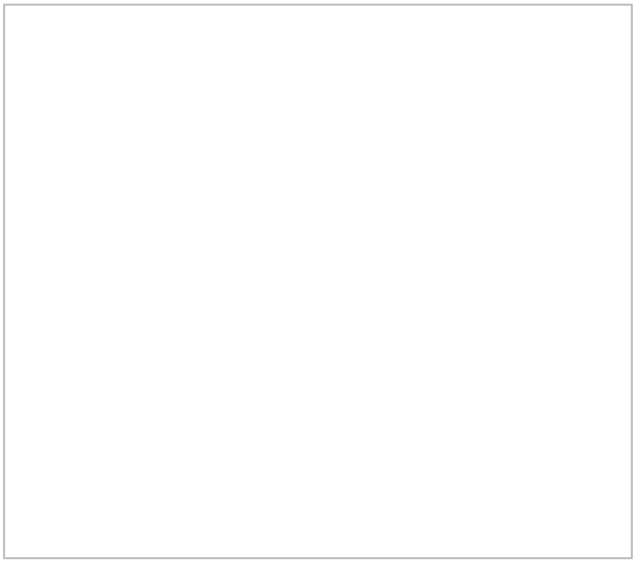
PCS

FSS

ESS FSS

FSS





DG PCS

PCS SOC 20% PCS

PCS

PPV ≥ PLOAD + PBAT

PV PPV

PLOAD PCS

PPV PLOAD PPV + PBAT

SOC 20% PCS

, 500kW PCS DG PV

PPV PLOAD PPV + PBAT

80% PCS

DG PCS

SOC 20%

PPV ≥ PLOAD + PBAT

PPV PCS

PPV PLOAD PPV + PBAT

SOC 20% PCS DG

DG

PPV PLOAD PPV + PBAT

SOC 80% PCS

BESS

-
-
- PCS PCS BMS

EMS

-

SCU

Site Control Unit, SCU 5

FSS BMU BCU SunGiga

SCU VPN

EMS

71.5kW
-55.2kW
SOC: 82.5%
Power Analysis
Day
Month
Year
Total
Export
Sold
Self-Used
Power Purchased
Production
Battery Charge
Battery Discharge
Total Production
Total Consumption

7.

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