EcoStruxure Storage Solution Commercial & Industrial

Expand your business at ease with Microgrids

Quick-to-install

Easy to deploy, thanks to **simplistic design** and **configuration tool**.

Modular

Modular,scalable with architecture with best in

class power conversion and battery technologies while EMS maximizing ROI from local production and electrical distribution.

Empowered supply-chain

Take benefit of the uninterrupted **Schneider Electric support** during the entire project lifecycle.

Life Is On Schneider Electric

How Energy Storage help the business keep going?

Today's New Energy Landscape presents many opportunities and challenges. With Schneider Electric's EcoStruxure™ architecture and new Battery Energy Storage System (BESS), you can now realize new opportunities and creatively solve challenges.

Schneider's BESS is a fully self-contained solution built upon a flexible, scalable and highly efficient architecture. An opportunity to **run 24/7** Autonomously.

No Distributed Energy Resource is more flexible and can deliver more valueto your site than a BESS. By storing energy, it can decouple energy production from energy consumption, enabling you to determine how best to minimize costs, optimize sustainable energy consumption, and generate revenue.

By gaining power backup through the advanced control system and verifying power quality and reliability for the customer.

Help your customer save on the **Energy Bills**

Demand Charge Reduction: Demand charges are a function of peak power demand and can represent as much as 50-70% of your energy bill.

Reducing your peak demand could save 10-20% on your energy costs.

Time-of-use/Tariff Management: Charge your batteries during off-peak rate
hours and discharge storage during mid/high-peak rate hours.

Renewable Self Consumption: A BESS helps you store excess energy produced by on-site renewables to be used when local consumption outstrips renewable output.

Charging a BESS from your renewable resource can save money with the federal solar Investment Tax Credit

EcoStruxure Microgrid Solution integrated

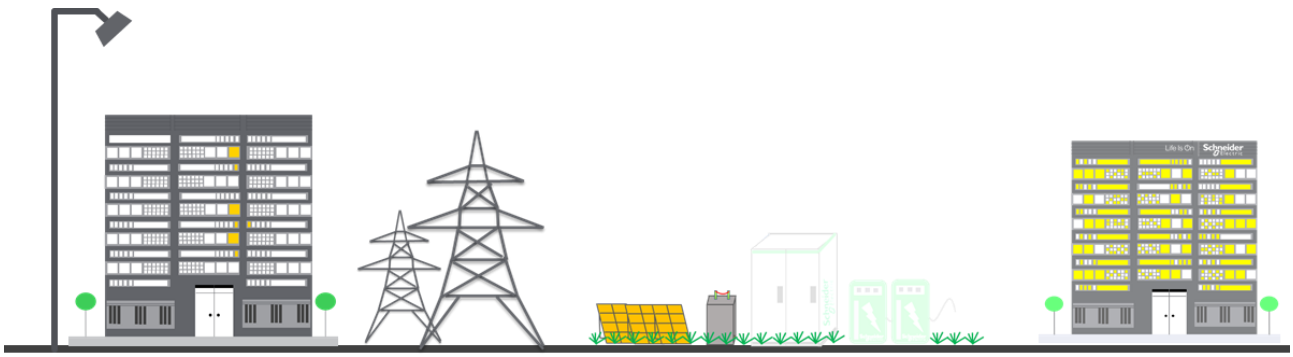
EcoStruxure Microgrid Solution for Small & Medium Buildings is a pre-packaged product with advanced controller (EMA+EMO-M) fitted in the Energy Control Center. EMA is responsible for the economic dispatch, while EMO-M maintains the stability of the site. It facilitates easy integration of DERs at

EcoStruxure Microgrid Build

EcoStruxure Microgrid Build is a web-based configuration tool that helps to configure the customer's control system in less than 2 hours.

Cautious about the **carbon footprints**?

Help your customer leverage the flexibility of DERs that facilitates self-consumption while reducing the carbon emissions and meet their sustainable targets



Utility-interactive Mode	
Nominal AC output power	500kVA
AC max power	550kVA
Battery voltage range	600~900V
DC max current	873A
Quantity of battery strings	1/4/8
AC voltage	380V
AC current	760A (short term overload 836A max)
AC frequency	50/60Hz(±2.5Hz)
THDi	≤3%
AC PF	Listed: 0.8~1 leading or lagging (Controllable)
Actual: 0.1~1 leading or lagging (Controllable	
Output THDu	≤2%（Linear load）
AC PF	Listed: 0.8~1 leading or lagging (Load-depend) Actual: 0.1~1 leading or lagging (Load-depend)
Overload Capability	105%~115% 10min 115%~125% 1min; 125%~150% 200ms

Physical Features		
Cooling	Forced air cooling	
Noise	70dB	
Enclosure	IP20	NEMA1
Max elevation	*3000m/10000feet (> 2000m/6500feet derating)*	
Operating ambient temperature	-20°C to 50°C (De-rating over 45°C）	
Humidity	0~95% (No condensing)	
Size (W×H×D)	1100×2160×800mm	
Weight	600kg	
Installation	Floor standing	
Other		
Peak efficiency	98.20%	
CEC efficiency	97% w/o transformer	
Protection	OTP, AC OVP/UVP, OFP/UFP, EPO, AC Phase Reverse, Fan/Relay Failure, OLP, GFDI, Anti-islanding	
Configurable protection limits	Upper/Lower AC Voltage/Frequency limit, Battery EOD voltage.	
AC connection	3-Phase 3-Wire	
Display	Touch Screen	
Communication	RS485,CAN,Ethernet	
Isolation	Non-isolation	
Certification	CE LVD IEC 62477, CE EMC IEC 61000, EN 50549-1:2019 G99, AS4777	ETL listed conforming to UL1741/UL 1741SA/UL 9540, CPUC RULE 21, ，CSA 22.2
Short circuit		
Fault current	2000A	
Fault duration	100ms	

Participate in Income Generating Opportunities

Ancillary Market Participation: Energy Regulation Commission orders have paved the way for BESS to participate in markets such as frequency regulation and wholesale energy.

Demand Response: BESS allows for participation in Demand Response programs to alleviate demand on the system.

Support “Islanding”

Microgrids: An integral part of your microgrid, a BESS can become your “anchor resource” when islanding, ensuring full utilization of your renewable assets and stabilization of your microgrid.

Provide Incremental Power

The expansion of Electric Vehicle (EV) and subsequent fleet management requires more charging stations at increasingly higher power levels. These power requirements often exceed

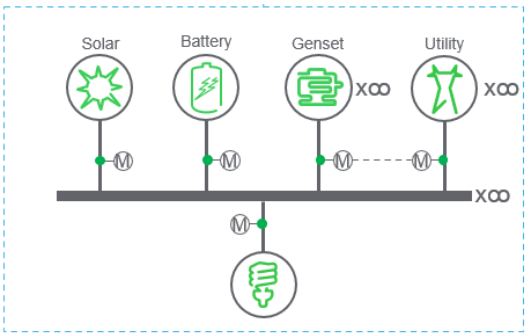
a site’s existing utility service. A strategically deployed BESS can add the additional power required, while also reducing site demand charges.

Standard Configurations Available

Schneider Electric offers standardized configurations from 50 kW to 500kWh with up to 1 MWh battery capacity. These standard blocks can be containerized or used to create larger systems. Furthermore, all our solutions integrate our Monitoring control and Operations system (EMO-EMA).

EcoStruxure Microgrid Advisor (EMA)

EcoStruxure Microgrid Operation (EMO)



Schneider Electric France,
20 rue Henry Tarze
38000 Grenoble
11, March 2021
Document Number

schneider-electric.com

Life Is On Schneider Electric