

BESS Product Guide

2024

About Us

IMMERSA LIMITED



At Immensa, our core purpose is to create a better future for generations to come, and this commitment is at the forefront of everything we do. Our long-term vision is to forge exclusive partnerships and build lasting relationships with individuals and organisations dedicated to sustainable energy and renewable solutions. We aspire to collaborate on impactful projects that benefit the environment, using our expertise in Battery Energy Storage Systems (BESS) and solar technology.

Adding BESS to existing technologies such as solar or wind can be extremely beneficial to businesses. Our smart systems are designed to be flexible to your needs and come with additional extras that can provide security to your business when you need it. EMS (Energy Management System) will reduce your business costs whilst our GMS (Grid Management System) can provide back up to your business in power outages and unforeseen circumstances. Immensa specialise in the delivery and integration of commercial BESS solutions.

Our team of experts offer bespoke designs based on the needs of your business/client and will work with you on concept development right the way through to maintenance. Not only that, but our knowledge of the industry also means we can sit with your prospective clients and act as your battery experts so if advice and guidance is what you need, we can help.



Storion - H30

COMMERCIAL & INDUSTRIAL SERIES



All-in-One Design



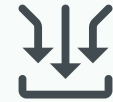
Quick Installation



Multiple System Operation Monitoring



Max 3 Systems in Parallel



Hybrid Input

POWER

30 kW

CAPACITY

34.56 - 55.3 kWh (C1 rated cells)

64.51 - 96.77 kWh (C0.5 rated cells)

KEY FEATURES

ALL-IN-ONE DESIGN

Single cabinet design containing batteries, PCS, DC/DC and EMS.

QUICK INSTALLATION

Backplug battery solution greatly reduces on-site installation time and risks.

MULTIPLE SYSTEM OPERATION MONITORING

Local SCADA monitoring and commercial and industrial cloud

MAX 3 SYSTEMS IN PARALLEL

Max power 90 kW by parallel operation (on/off-grid)

HYBRID INPUT

Battery Input: 150V ~ 750V (350V ~ 750V at Full Load) 0.25C ~ 1C Charging/Discharging

PV input: 3*MPPT with 250V ~ 830V PV Voltage (MPPT 200V ~ 830V)



STORION - H30

STORION - H30 - 0



Storion - G2 - H50

COMMERCIAL & INDUSTRIAL SERIES



All-in-One Design



Support Multi-Directional Roof



Multiple System Operation Monitoring



Max 3 Systems in Parallel

POWER

50 kW

CAPACITY

8 kWh Battery Module

Expandable from 104.83 - 209.66 kWh

KEY FEATURES

ALL-IN-ONE DESIGN

Single cabinet design containing batteries, PCS, DC/DC and EMS.

SUPPORT MULTI-DIRECTION ROOF

PV Input: 4*MPPT

MULTIPLE SYSTEM OPERATION MONITORING

Local SCADA monitoring and commercial and industrial cloud

MAX 3 SYSTEMS IN PARALLEL

Max power 90 kW by parallel operation (on/off-grid)

OUTDOOR IP55

INDOOR IP21



Storion T50/T100

COMMERCIAL & INDUSTRIAL SERIES



UPS Ability



Easy Installation & Low Maintenance



Modular Design



24/7 Monitoring with Local Interface



Off-Grid Ability

POWER

50 kW / 100 kW

MAX. CAPACITY

967.60 kWh



KEY FEATURES

AS STANDARD

Max. 10 clusters of 12 8.064 kWh

Hybrid, PV overpanel 220%

Backup Power/Island Mode optional



Storion T50/T100

COMMERCIAL & INDUSTRIAL SERIES



Inverter



Model	PWG2-50k	PWG2-100k
PV Open Circuit Voltage MPPT Number	700 ~ 900 V (MPPT: 520 ~ 800 V)	700 ~ 900 V (MPPT: 520 ~ 800 V)
MPPT Number	1	1
Battery Voltage Range	250 ~ 520 V	250 ~ 520 V
Max. Charging/Discharging Current	150 A	300 A
Max. Charging/Discharging Power	50 kW	100 kW
Rated Voltage	400 V	400 V
Grid Voltage Range	340 ~ 460 V, 3L/M/PE	340 ~ 460 V, 3L/M/PE
Power Factor Range	0.99/-1 ~ 1	0.99/-1 ~ 1
Overload Capacity	100% ~ 110% (long-term); 110% ~ 120% (1 min); 120% ~ 150% (200 ms)	
Rated AC Current	72 A	144 A
Off-Grid Output Voltage Range	360 ~ 440 V	360 ~ 440 V
Rated Output Frequency	50/60 Hz	50/60 Hz
Backup	UPS (with STS)	UPS (with STS)
Dimensions (W x D x H)	800 x 800 x 2160 mm	800 x 800 x 2160 mm
Weight	520 Kg	750 Kg

Storion T50/T100

COMMERCIAL & INDUSTRIAL SERIES



Battery



Battery Module	M38210-S
Battery Type	700 ~ 900 V (MPPT: 520 ~ 800 V)
Pack	1
Internal Resistance	250 ~ 520 V
Nominal Capacity	150 A
Rated Voltage	50 kW
Operating Voltage	400 V
Max. charging/Discharging Current	340 ~ 460 V, 3L/M/PE
Cycle Life	0.99/-1 ~ 1
Communication	
Dimensions (W x D x H)	72 A
Weight	360 ~ 440 V
String Pack QTY	50/60 Hz
Certifications	UPS (with STS)

Battery Cluster System



Configuration	HV900105, M38210-S, Rack
Dimensions (W x D x H)	743.3 x 602 x 2241.5 mm
Rack	2 columns, 7 layers
Overall Weight	642 ~ 890 kg
Capacity of a Cluster	6408 ~ 97.2 kWh
Max. Charging/Discharging Current	105 A
Battery Cluster Voltage Range	288 ~ 506.55 V

Storion TB250/500

COMMERCIAL & INDUSTRIAL SERIES



Self Sufficient



Time Period Charge and Discharge



Peak Shaving and Load Shifting



Dual Power Supply



Backup

STS

TX

PCS

DC Junction

Racks & Cells



KEY FEATURES


BESPOKE SYSTEM

System is buildable in design and capacity. For more information on how we can build a system to suit your needs, please get in touch with one of our experts to discuss further.

01453 545222


Info@immersa.co.uk



 Suite 4F, Drake House, Long Street, Dursley. GL11 4HH

 01453 545222

 Info@immersa.co.uk

 www.immersa.co.uk