



TYVA ENERGIE Group has developed a new generation of batteries, TYVA MODULOO's modular solutions

breaks new ground in the way Li-ion batteries are assembled with its ready-to-use 3D modules.

This new, innovative process makes it easier to make and implement Li-ion batteries.

3D Modular

TYVA MODULOO's products represent a new generation of batteries. They make it possible to quickly and economically build Li-ion batteries in the three dimensions. This flexibility allows for serial and parallel assemblies without any development or certification costs.



In the same module, **TYVA MODULOO** offers high-density batteries (180 Wh/Kg) as well as power batteries with permanently high discharge rates (up to 15 C). Thanks to our multi-chemistry internal modular platform, we can integrate all the chemistries on the market: LFP, NMC, LMO, Ni-Rich and NCA.

Eco-friendly

TYVA MODULOO breaks new ground by offering Li-ion batteries with interchangeable electro-chemical elements, ensuring that the other battery components can be reused several times. **TYVA MODULOO** therefore reduces the carbon footprint of Li-ion batteries. Furthermore, our customers make the most of the technological developments in electro-chemical cells (increased capacity and life-span).

Made in France

Our batteries are made in France on 2 production sites located in the Drôme/Ardèche area, about 70 kilometers south of Lyon .

80% of **TYVA MODULOO's** components are supplied less than 60 minutes from the production sites.

By producing in France and using modular design, we guarantee our customers delivery times of no more than a week at a competitive price.



Main features					
Nominal voltage	3.2 à 14.8 V				
Nominal capacity	8.8 à 27 Ah				
Energie	28 à 97 Wh				
Weight	490 à 540 g				
Dimensions	75 x 75 x 106 mm				
Working Temperature	-30° à + 70 °C				
Box material	Blend ABS UL				







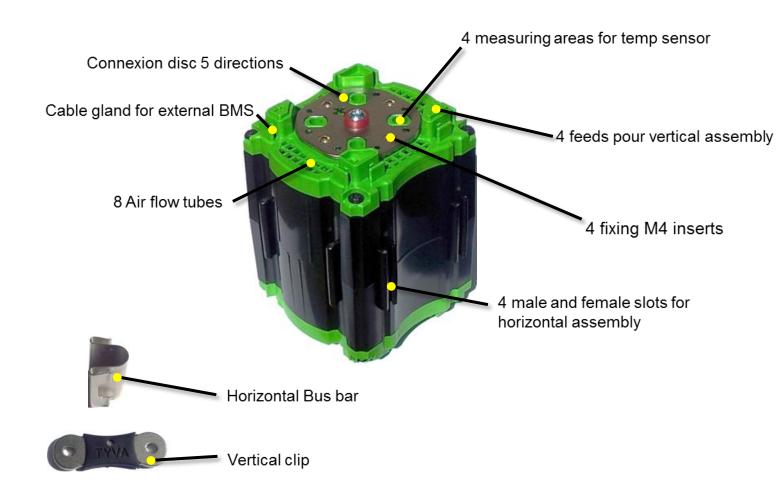






TYVA MODULOO advantages

- ✓ 3D Modular Li-ion battery
- Multi-chemistry Platform: LFP, NMC, NCA, LMO, LTO
- Power and energy products range
- Safe construction
- ✓ OEM et ODM applications
- ✓ Fast and affordable construction
- ✓ No development and certifications fees
- ✓ Easy mechanichal assembly with Bus bar
- Air flow management built-in
- ✓ 18650 cells integration
- Cells replacement capability
- ✓ Made in France







TYVA MODULOO applications



Robots



Mobile **Equipments**





Outdoor lighting



Home storage

TYVA Moduloo 82 Montée des Aygas 07100 Annonay - France info@tyva-energie.com

Electric mobility





TYVA Moduloo PRODUCTS

TYVA Part Number	Nominal voltage	Nominal capacity	Max Weight	Discharge current max	Charging Current max	AC Impedance AC mΩ	Chemistry	Cycles Nbr	
	×		4 Å 🗓	$\stackrel{\frown}{\Longrightarrow}$	1000	Ω	<u> </u>	O'	
ENERGIE RANGE									
FE0312OL	3.2 V	12 Ah	500	30 A	24 A	6.5	LFP	>2000	
FE0314LN	3.2 V	13.6 Ah	500	30 A	25 A	6	LFP	>1500	
ME0323SG	3.65 V	23.2 Ah	540	30 A	10 A	3.5	NCA	>700	
ME0323PC	3.7 V	23.2 Ah	540	30 A	10 A	3.5	NCA	>700	
ME0327PC	3.6 V	27 Ah	540	35 A	10 A	9	LMO	>500	
FE1203LN	13.2 V	3.4 Ah	510	7 A	7 A	88	LFP	>1500	
ME1206PC	14.8 V	5.8 Ah	560	10 A	2.9 A	-	NCA	>700	
POWER RANGE									
MP0317SG	3.6 V	17 Ah	540	35 A	17 A	4.5	NMC	>700	
MP0317LM	3.6 V	17 Ah	540	35 A	17 A	4.5	NMC	>1000	
FP1202OL	13.2 V	2.2 Ah	510	25 / 50 A ¹	10 A	40	LFP	>3000	
FP1202LN	13.2 V	2.2 Ah	510	25 / 50 A ¹	10 A	50	LFP	>3000	
			Н	IGH POWER RAI	NGE				
FP0380OL	3.3 V	8.8 Ah	500	90 / 240 A²	40 A	2.5	LFP	>3000	
FP0380LN	3.3 V	8.8 Ah	500	90 / 240 A²	40 A	2.7	LFP	> 3000	
MP0320LM	3.6 V	20 Ah	540	50 / 240 A²	32 A	2.7	Ni-Rich	>700	

Nota:

- 1: Pulse of 50 A during 1 s maximum
- 2: Pulse of 240 A during 10 s maximum





TYVA Moduloo

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