



Lithium ion Batteries



2025 Catalogue

Introduction

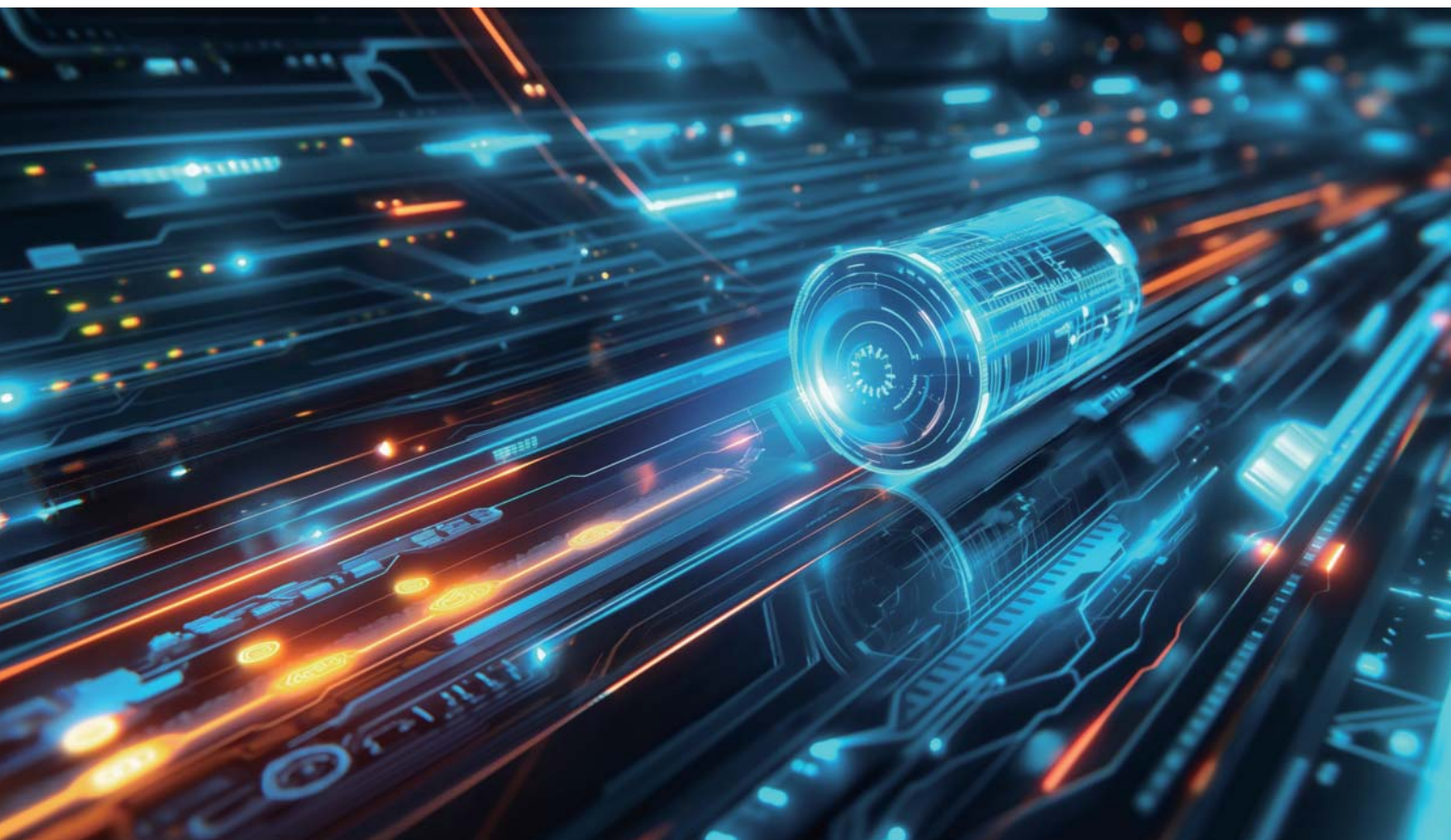
With nearly 30 years of expertise in battery research, development, and manufacturing, OMV has earned its place as a trusted leader in the global energy industry. Our name reflects our mission: to **Optimize** energy efficiency, **Maximize** performance, and **Vitalize** power for a smarter, more sustainable future.

Driven by relentless innovation and precision engineering, we set new benchmarks in energy density, cycle life, and efficiency. Our state-of-the-art intelligent production lines ensure unmatched quality, scalability, and reliability—delivering solutions that optimize energy use, maximize longevity, and vitalize progress.

From everyday household batteries to advanced industrial power solutions, OMV's diverse portfolio is designed to seamlessly integrate into modern life.

At **OMV**, we go beyond just delivering batteries—we empower possibilities and fuel your future every step of the way.

OMV: Optimize, Maximize, Vitalize Your Power!



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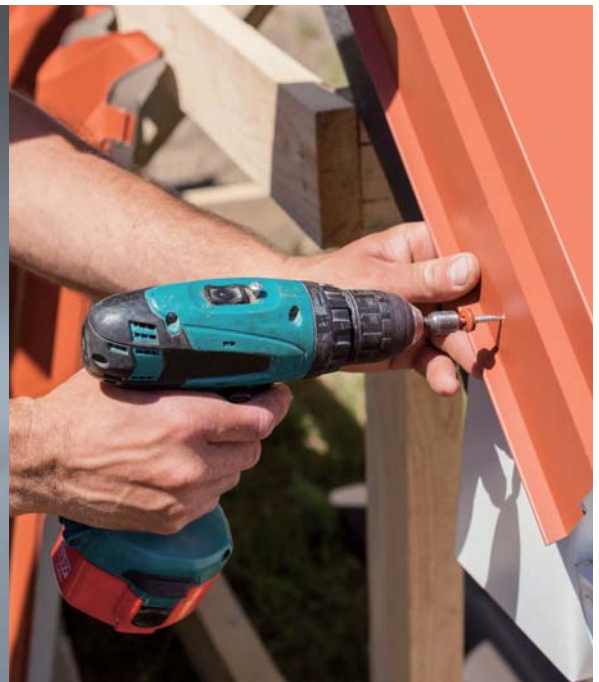
NCM Cells

OMV NCM (Nickel-Cobalt-Manganese) lithium ion cells are widely used in high-performance applications that demand both high energy density and reliable performance. Known for the excellent energy density, power output, and efficiency, the OMV NCM Cells offer a well-balanced combination of capacity, stability, lifespan, and are kind to human health and living environment.

NCM Cylindrical Cells

Main Features:

- Low self-discharge rate
- Fast charging capability
- High energy density, enabling compact designs for power-intensive applications
- Long cycle life, retain up to 80% capacity at best after 1000+ cycles @100% DOD
- Excellent performance across -20°C to 60°C
- Ensured safety, excellent uniformity



High-Rate High-Capacity Series

Model	Voltage (V)	Capacity (mAh)	Typical Internal Resistance (mΩ)	Max. Discharge Current (A)	Dimension (mm)	
					Diameter	Height
INR21700-4000	3.6	4000	12	40	22	71
INR21700-4200	3.6	4200	4.5	45	22	71
INR21700-4500	3.6	4500	3.5	60	22	71
INR21700-5000	3.6	5000	11	30	22	71
INR21700-5000	3.6	5000	5	45	22	71
INR21700-5500	3.6	5500	12	30	22	71
INR18650-2000	3.6	2000	12.5	30	19	66
INR18650-2500	3.6	2500	14	30	19	66
INR18650-2600	3.6	2600	14	13	19	66
INR18650-3000	3.6	3000	15	15	19	66
INR18650-3000	3.6	3000	14	30	19	66
INR18650-3350	3.6	3200	32	10	19	66
INR18650-3500	3.6	3350	32	10	19	66

Applications:



UAV



Power Tools



Gardening Tools



Portable Power Stations

Common-Rate Series

Model	Voltage (V)	Capacity (mAh)	Dimension (mm)	
			Diameter	Height
ICR17335-750	3.7	750	17	34
ICR18650-1200	3.7	1200	19	66
ICR18650-1500	3.7	1500	19	66
ICR18650-1800	3.7	1800	19	66
ICR18650-2000	3.7	2000	19	66
ICR18650-2200	3.7	2200	19	66
ICR18650-2600	3.7	2600	19	66
ICR14500-800	3.7	800	14.5	50.5
ICR14500-1200	3.7	1200	14.5	50.5
ICR10430-320	3.7	320	10.5	43.5
ICR21700-4000	3.7	4000	22	71
ICR26650-5000	3.7	5000	26.5	66.5

Applications:



Power Bank



Bluetooth Speaker



Flashlight



Sensor Light

INR21700-5500MAH 30A

Main Features:

- High power capacity, extended operating time
- High energy density, ideal for power-intensive applications
- Long cycle life, ultra low self-discharge rate
- Excellent performance across -20°C to 60°C
- Ensured safety, excellent uniformity

264Wh/kg
High Power Density

5500mAh
High Capacity

30A
Continuous Discharge Current

OMV LI-ION CELL
INR21700 3.6V 5500MAH 30A

UAV Power Tools Gardening Tools RC Aircraft

Specifications

Model	INR21700-5500
Voltage	3.6V
Capacity	5500mAh
Max. Internal Resistance	12 mΩ
Max. Continuous Discharge Current	30 A
Dimension	22 x 71 mm

Discharge Efficiency

Lab-test Battery NO.	1.1A		5.5A		10A		15A		20A		30A	
	Discharge Capacity (mAh)	Capacity Ratio	Discharge Capacity (mAh)	Capacity Ratio	Discharge Capacity (mAh)	Capacity Ratio	Discharge Capacity (mAh)	Capacity Ratio	Discharge Capacity (mAh)	Capacity Ratio	Discharge Capacity (mAh)	Capacity Ratio
#1	5549	100%	5418	97.6%	5412	97.5%	5377	96.9%	5306	95.6%	5047	91%
#2	5587	100%	5458	97.7%	5458	97.7%	5426	97.1%	5357	95.9%	5051	90.4%
#3	5559	100%	5415	97.4%	5458	97.5%	5387	96.9%	5317	95.6%	5036	90.6%
Average	5565	100%	5430	97.6%	5430	97.6%	5397	97%	5327	95.7%	5045	90.7%

NCM Pouch Cells

Main Features:

- Semi-solid configuration
- High energy density up to 337Wh/kg
- High-rate discharge
- Low internal resistance with reduced heat generation
- Long cycle life, reliable performance
- Excellent performance across -20°C to 60°C



High Energy Density (Semi-Solid) Series:

Model	Rated Voltage (V)	Capacity (Ah)	Max. Internal Resistance (mΩ)	Max. Continuous Discharge Current (A)	Max. Discharge Rate	Dimension (mm)			Weight	Energy Density (Wh/kg)
						Thickness	Width	Length		
INP7872170-16Ah	3.7	16	1.5	112	7C	8.1	73	172	215	275
INP8072170-17Ah	3.7	17	1.5	119	7C	8.5	73	172	225	280
INP1172170-22Ah	3.7	22	1	154	7C	10.6	73	172	294	277
INP9787187-27Ah	3.7	27	0.8	135	5C	10.1	88	189	365	274
INP1187187-30Ah	3.7	30	1	150	5C	11.1	88	189	406	273
INP1187187-39Ah	3.7	39	0.8	195	5C	11.1	88	189	428	337

High-Rate Discharge Series:

Model	Rated Voltage (V)	Capacity (Ah)	Max. Internal Resistance (mΩ)	Max. Continuous Discharge Current (A)	Max. Discharge Rate	Dimension (mm)			Weight	Energy Density (Wh/kg)
						Thickness	Width	Length		
INP1190190-22Ah	3.7	22	1	220	10C	10.7	91	195	403	202
INP1172170-16Ah	3.7	16	1	240	15C	10.9	73	172	294	201
INP8648145-6000	3.7	6	1.5	240	40C	8.8	49	147	146	152
INP1146145-8000	3.7	8	1.2	240	30C	11	47	146	145	204

Applications:



UAV



Agricultural Drone



RC Car



RC Aircraft

LFP (LiFePO4) Cells

OMV LFP (LiFePO4) lithium ion Cells offer 95% or higher efficiency in charging & discharging. Known for their outstanding cycle life and resistance to overheating, they are ideal choice for applications requiring high durability and safety. Additionally, the composition is kind to human health and living environment, which contributes greatly to a sustainable planet.

LFP Cylindrical Cells

Main Features:

- Superior safety and stability
- High power output and fast charging, low self-discharge rate
- 95% or higher efficiency in charging & discharging
- Stable chemistry, long cycle life up to 2000+ cycles
- Excellent performance across -10°C to 60°C



Model	Voltage (V)	Capacity (mAh)	Max. Discharge Current (A)	Dimension (mm)	
				Diameter	Height
IFR14430-400	3.2	400	1.2	14.5	44
IFR14500-400	3.2	400	1.2	14.5	51
IFR14500-600	3.2	600	1.8	14.5	51
IFR18500-1000	3.2	1000	3	18.5	50.5
IFR32700-6000	3.2	6000	18	32.5	71
IFR32140-15000	3.2	15000	45	33.5	140.5
IFR40135-20000	3.2	20000	60	40.5	137

Applications:



Golf Carts



Electric Scooter



E-bicycle



Lawn Lamp



Portable Power Stations

LFP Prismatic Cells

Main Features:

- Ultra-high energy ratio and energy storage efficiency
- High discharge rate & stable discharge platform
- Long cycle life & Low levelised cost of storage
- Ultra-low internal resistance, excellent heat dissipation performance
- Excellent performance across -20°C TO 60°C



Capacity (Ah)	Nominal Voltage(V)	Operating Voltage(V)	Energy Density (Wh/kg)	Cycle Life	Weight (Kg)	Dimensions(mm)			
						D	W	H (without terminals)	H (with terminals)
45	3.2	2.5-3.65	140	≥ 4000@25°C 1C/1C 100%DOD 80%Ret	≤ 1.2	39.8	149	99.1	101.7
50	3.2	2.5-3.65	140	≥ 4000@25°C 1C/1C 100%DOD 80%Ret	≤ 1.2	39.8	149	99.1	101.7
86	3.2	2.5-3.65	130	≥ 3000@25°C 1C/1C 100%DOD 80%Ret	≤ 2.2	47.8	173.9	128	132.7
100	3.2	2.5-3.65	150	≥ 3000@25°C 1C/1C 100%DOD 80%Ret	≤ 2.25	47.8	173.9	128	132.7
125	3.2	2.5-3.65	160	≥ 3000@25°C 1C/1C 100%DOD 80%Ret	≤ 2.55	33.3	200.6	169.4	172
150	3.2	2.5-3.65	153	≥ 8000@25°C 1C/1C 100%DOD 70%Ret	≤ 3.23	40.9	174.2	204.4	207.1
173	3.2	2.5-3.65	173	≥ 3000@25°C 1C/1C 100%DOD 80%Ret	≤ 3.3	40.9	174.2	204.4	207.1
206	3.2	2.5-3.65	160	≥ 3000@25°C 0.5C/0.5C 100%DOD 80%Ret	≤ 4.2	53.8	174.2	204.4	207.1
228	3.2	2.5-3.65	174	≥ 4000@25°C 0.5C/0.5C 100%DOD 80%Ret	≤ 4.35	53.8	174.2	204.4	207.1
277	3.2	2.5-3.65	160	≥ 3000@25°C 0.5C/0.5C 100%DOD 80%Ret	≤ 5.6	71.8	174.2	204.4	207.1
280	3.2	2.5-3.65	161	≥ 6000@25°C 0.5C/0.5C 100%DOD 80%Ret	≤ 5.76	71.8	174.2	204.4	207.1
304	3.2	2.5-3.65	175	≥ 3000@25°C 0.5C/0.5C 100%DOD 80%Ret	≤ 5.6	71.8	174.2	204.4	207.1
314	3.2	2.5-3.65	173	≥ 8000@25°C 0.5C/0.5C 100%DOD 70%Ret	≤ 5.8	71.8	174.2	204.4	207.1

Applications:



UPS



Telecom ESS



Grid ESS



Portable Power Stations

LFP Pouch Cells

Main Features:

- Large capacity / high-rate discharge
- Long cycle life reaching 6000+ cycles
- Ensured safety & durability
- Low self-discharge rate
- Excellent performance across -10°C to 60°C
- Flexible size design, adaptable to compact or irregular spaces



Model	Voltage (V)	Capacity (Ah)	Max. Discharge Current (A)	Dimension (mm)		
				Thickness	Width	Length
IFP95132200-25000	3.2	25	25	9.5	132	200
IFP75160242-30000	3.2	30	60	7.5	160	242
IFP75167262-35000	3.2	35	70	7.5	167	262

Applications:



UPS



Forklifts



Auto Rickshaw



Electric Scooter



Portable Power Stations

LFP Battery Packs (Lead-acid Replacement)

Designed for efficiency, longevity, and safety. OMV LFP (Lithium Iron Phosphate) Battery Packs outperform the lead-acid batteries in almost every aspect, making them an ideal drop-in replacement. With their superior performance and environmental friendliness advantages, OMV LFP battery packs are the smart, long-term investment for those looking to replace outdated lead-acid technology.

Main Features:

- Enduring & reliable performance with sufficient battery capacity
- Built-in BMS system for all-round protection & durability
- High discharge rate & stable discharge platform
- Ultra-low internal resistance, excellent thermal performance
- High safety & reliability with ultra-low internal resistance



Model	Voltage (V)	Capacity (Ah)	Dimensions: L*W*H*TH(mm)	Weight (kg)	Max Charge Current(A)	Max Discharge Current(A)	Max Pulse Discharge Current(A)
OPL660	6.4	6	70*47*102*107	0.4	3	6	20A(<3S)
OPL670	6.4	7	151*35*94*100	0.54	3.5	7	20A(<3S)
OPL1260-A	12.8	6	90*70*101*107	0.75	3	6	20A(<3S)
OPL1260-B	12.8	6	151*65*94*100	0.8	3	6	20A(<3S)
OPL1270	12.8	7	151*65*94*100	1.06	3.5	7	20A(<3S)
OPL1290	12.8	9	151*65*94*100	1.34	4.5	9	20A(<3S)
OPL12120	12.8	12	151*98*95*101	1.55	6	12	30A(<3S)
OPL12240	12.8	24	181*77*167*167	2.9	12	24	60A(<3S)
OPL12-30	12.8	30	165*175*125*125	3.9	15	30	60A(<3S)
OPL12-33	12.8	33	195*130*156*167	4.9	16.5	30	60A(<3S)
OPL12-42	12.8	42	197*165*170*170	5.7	21	42	60A(<3S)
OPL12-54	12.8	54	229*138*212*217	6.7	27	54	120A(<3S)
OPL12-84	12.8	84	260*169*213*218	10.2	42	60	120A(<3S)
OPL12-100	12.8	100	328*172*215*220	13.1	50	100	200A(<3S)
OPL12-150	12.8	150	483*170*240*240	19.2	75	100	200A(<3S)
OPL12-200	12.8	200	522*238*218*220	27	100	100	200A(<3S)

Applications:



UPS



RVs



Fish Finder

OMV



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