

# BATTERAY

X-RAY SYSTEM FOR SORTING OF PORTABLE WASTE  
BATTERIES & ACCUMULATORS



**Zn-Carbon**  
**Alkaline**  
**Li-Ion**  
**Li-Primary (Li-SOCl<sub>2</sub>, Li-MnO<sub>2</sub>, Li-FeS<sub>2</sub>)**  
**Nickel-Cadmium (NiCd)**  
**Nickel-Metal hydride (NiMH)**

## KEY FEATURES

Battery sorting with AI-driven X-ray technology

Damaged, corroded and counterfeit batteries friendly

Conveyor speed allows to provide sorting process with a productivity of 300 kg per hour

Purity of sorting for Alkaline/ZnC-99,5%

Wide coverage standard map which includes the most popular types and sizes of batteries

BATTERAY is a unique technology with no equals at the market. The influence of the upper layer of the battery is excluded. Even if a label or marking are missing, or if the battery is counterfeit the system will correctly determine the type of battery.

BATTERAY recognizes the type of batteries by scanning with X-Ray radiation. The operator is protected from X-rays.

There is a possibility to add other batteries types to the preliminary sort map, including non-standard sizes from AAAA to 21700.



## TECHNICAL SPECIFICATIONS

### CHARACTERISTICS (PARAMETERS): VALUE



Overall dimensions:	
Length	313,2"
Width	105,7"
Height	94,5"
Weight	5291 lbs
Capacity of the loading hopper	772 lbs
Size of the loading hopper	66 gal
Speed of sorting conveyor	0,8-1 m/sec
Sorting capacity	up to 25000 batteries per hour
Throughput capacity	770-1100 lbs per hour
Pneumatic	8 bar, 200-500 SLPM
X-ray protection	Full operator protection
X-ray emission	Complies with the standard: 1 $\mu$ Sv/h at any point at a distance of 10 cm from the device. Typical value of our system less than 0.3 $\mu$ Sv
Purity of sorting:	
Zinc-carbon, alkaline	99,5 %
All groups	95 %

### SORT MAP (pretrained by default)

SIZE	GROUP / INJECTOR						
	Zn	ALK	NiCd/MH*	NiCd	NiMH	Li-Primary *	Li-Ion
AAAA (LR61)	+	+	+	+	+		
AAA (R03)	+	+	+	+	+	+	+
AA	+	+	+	+	+	+	+
C	+	+	+			+	
D	+	+	+	+	+	+	
6F22 (9V)	+	+	+			+	
A23		+					
A27		+					
Cr2							
16340 (R123)						+	+
1/2AA						+	
18650							+
21700							+

\* Li-Primary Li-SO2, Li-FeS2, Li-MnO2

### SOFTWARE FUNCTIONS

- Program for adding batteries not included in preliminary trained sort map. Including non-standard sizes from AAAA to 21700
- Standard sorting (default sort map)
- Sorting with customer added batteries (default sort map + customer base) – the user can add previously unrecognized batteries to the database

