## **2017 AMOCELL BATTERY**



## Products

### **AMO Battery – Flexible battery**



Classification	Appearance	Specification					
		Capacity [mAh]	Dimension [mm]	Weight [g]	Nominal Voltage [V]	Energy density	Application
Flexible battery	1	42	1.8 x 16.0 x 80.0	2.1	3.7	67.5 [Wh/L]	Smart band
	2	135	2.1 x 26.0 x 82.0	4.7		145 [Wh/L]	Smart watch
	3	650	2.8 X 26.0 X 183.0	17.5		226 [Wh/L]	Wriess Headset
	4	650	2.7 x 61.0 x 87.0	17.6		236 [Wh/L]	Card
	5	2500	6.6 x 27 x 400	112		130 [Wh/L]	VR
	6	2000	5.0 x 28 x 600	100		90 [Wh/L]	Smart Belt

# **Application Note**





#### **①** Why bendable battery is necessary for headset with battery embedded in head band

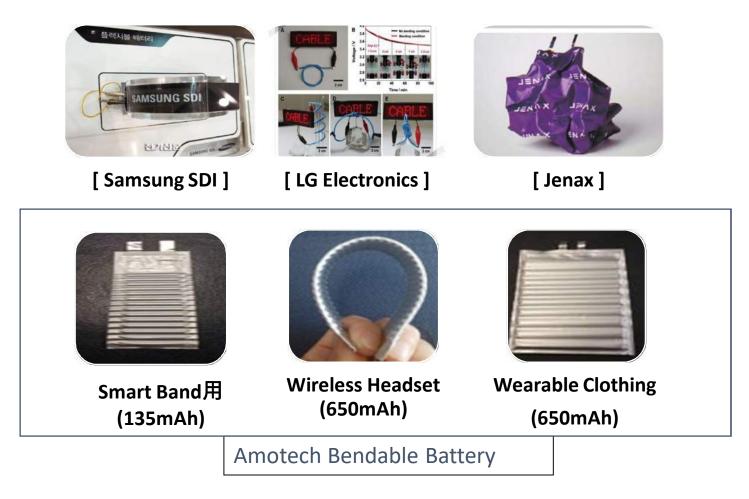
- $\rightarrow$  Current battery : hard case is used to protect battery from being bent
- → Our bendable battery : can be embedded in head band without any problems caused by wearing on and wearing off movement







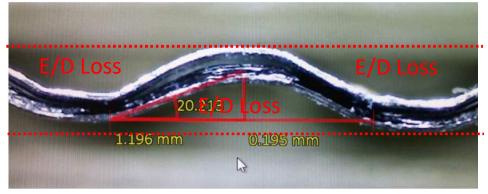
- ② What are the differentiation factors from other flexible battery providers ?
- →Safety and higher energy density than other flexible battery provider How? Our bendable battery is made of more than 95% of materials that current batteries in the market use.



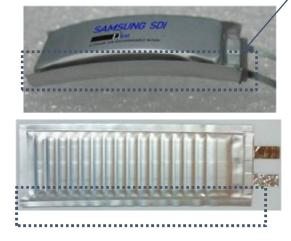


**③** The reason for low energy density for our battery size

→ 1) Loss due to the flexible structure (indentation on the surface)
2) Loss due to no folding of battery sealing side
3) Characteristics of Cathode : focusing more on safety rather than energy density when choosing the Cathode



Loss of energy density due the flexible structure



If sealing side is folded, there could be some restrictions on bendable features

Normal battery folds battery sealing side for higher Energy density



#### ④ What are the advantages of our bendable battery

1) Increase in battery usage hour

	Current battery (400mAH)	Current battery + Our bendable battery in head band
Battery usage hour	1 week	More than 2~3 weeks



- 2) Improvements in design and acoustic feature by removal of battery in ear cup
  - 1) Able to design sound path without restriction due to the battery in ear cup
  - 2) Increase in frequency range of sound
  - 3) Better sound performance
  - 4) More sleek design applicable

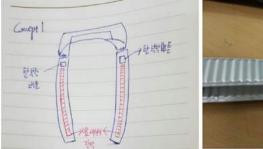
Company	Plantronics	Sennheiser	Parrot
Wiress Headset	Remove 4 screws Battery Pads Battery Battery		N7 UR 742 of officients. 1. KH 2018 2. Arean contacts 3. Arean Cont
Battery capacity	400mAh	AAA in both side	350mAh
Usage Hour	24hour	20hour	18hour (in case of using all function : 6hour)

### AR/VR\_Techincal Issue

#### (1) AR\_1300mAh x 2set



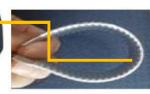


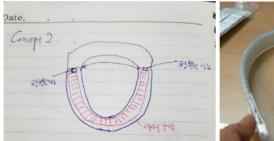


ltem	Specification	
Norminal Capacity(0.2C)	1300mAh	
Max Charging	1.0C	
Max Discharging	1.0C	
Cycle Life @1.0C, DOD 80%	80% @ 500 cycles	
Bending Cycles @R60	5,000	
Dimension	27mm*190mm*3.5t	
Weight	60 g	

#### (2) VR\_2600mAh x 1set









ltem	Specification	
Norminal Capacity(0.2C)	2600mAh	
Max Charging	1.0C	
Max Discharging	1.0C	
Cycle Life @1.0C, DOD 80%	80% @ 500 cycles	
Bending Cycles @R60	5,000	
Dimension	27mm*400mm*6.6t	
Weight	110 g	

Thanks for your attention !!!