

# BPK 221

## Polymer Lithium Ion Rechargeable Battery



### 1. FUNCTION

The BPK 221 batteries are rechargeable Polymer Lithium Ion (PLI) batteries that provide power supply to handheld radios with higher autonomy for small size and low weight .

### 2. DESCRIPTION

The battery include in a aluminum hard shell :

- Six PLI cells, ( 3 cells in parallel and 2 in series (3p2s)
- One circuitry for electronic protections and cells balancing for optimal charge.

The upper connector is composed of 2 female sockets for the connections (+ and -) to the handheld radio or to a BCH221 charger. The connector shape forbids use on other chargers. .

### 3. CHARACTERISTICS

#### 3.1. Electrical characteristics

Rated voltage :	7.4V
Rated capacity:	> 2.7 Ah in T° range : +10°C to +60°C; 80% derating at –10°C.
Charging:	< 4h at C/2 and T° range: -10°C, +60°C
Protections:	The battery is protected against short-cuts, over currents, polarity reversal, as well as against over-charge, over-discharge, and over-temperature.

#### 3.2. Mechanical Characteristics

Dimensions:	Height: 60 mm, Width:68 mm, Depth: 39 mm
Weight:	< 250 g
Colour:	NATO IR Army green; BPK 221 SAND colour : BPK 221-S

#### 3.3. Environmental characteristics:

Compliant to MIL-STD 810E for climatic and mechanical conditions:

- Operating temperature : -20°C , +60°C
- Charging temperature range: -10°C, +60°C
- Storage T° :-40°C +70°C
- Transportation and operations vibrations, Shocks @ MIL-STD 810E
- Drops: 26 from 1.2m height on to wooden board @ MIL-STD 810E
- Watertightness: under 1m water height during 2 hours.
- Air transport ; Frost and condensation; Salt spray, Humidity, Solar radiation

Compliant to MIL-STD 461D for EMC / EMI conditions.

#### 3.4. Storage

The battery has to be stored half charged, in +5°C to +25°C dry atmosphere.  
A yearly maintenance charge is required.