

## Features

- High temperature
- High Capacity

## RS PRO Rechargeable Battery Nickel- Metal Hydride Battery 4/5 SubC 2100 mAh

RS Stock No.: 0677112



RS Professionally Approved Products bring to you professional quality parts across all product categories. Our product range has been tested by engineers and provides a comparable quality to the leading brands without paying a premium price.

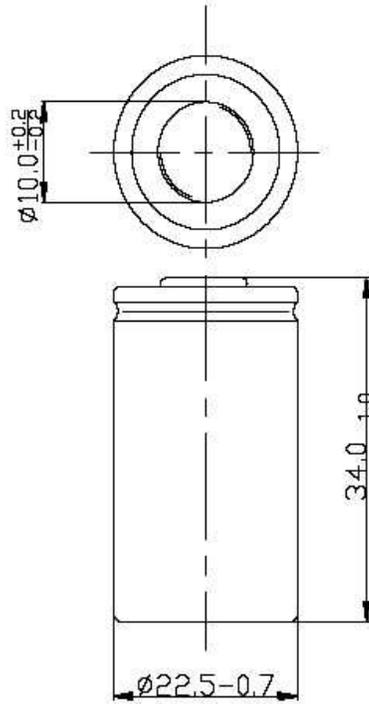
## Product Description

The RS PRO Rechargeable Nickel Battery has a long service life, up to 1000 charge/discharge cycles. This product provides a reliable and safe power source with a wide range of temperature reliability, low discharge rate and great overcharge

## General Specifications

Nominal Voltage		1.2V/cell
Capacity	Typical	2100 mAh/0.2 CmA
	Minimum	2100 mAh/0.2 CmA
Charge	Standard	0.1 CmA for 16 hrs.
	Rapid	0.2CmA approximate: 6.0 hours 0.5CmA approximate:1.1 hours (With- $\Delta V = 5\sim 10\text{mV/cell}$ , Temp., Time charging control)
	Trickle	0.03 CmA ( 1 month )
Maximum Discharge Current		10 CmA (21A)
Discharge Cut-off Voltage		2 V/cell
Cycle Life		$\geq 500$ cycles
Applicable Temperature	Standard Charge	0~+45 $\square$
	Rapid Charge	0~+40 $\square$
	Discharge	-20~+60 $\square$
Storage	Within one year	-20 $\square$ ~+35 $\square$
	Within 3 months	-20 $\square$ ~+45 $\square$
	Within 1 month	-20 $\square$ ~+55 $\square$
Relative Humidity Range		65% $\pm$ 20%
Dimension		D = 22.5.0.7 mm max., H = 34.10 mm max.
Weight		Approx. 42 g

## Pack Drawing



## Approvals

Declarations	MFR Declaration of Conformity
Hazardous Area Certification	ATEX / IECEx
Standards Met	VDE

Safety Requirement for User

Please keep in mind the following points when operating, designing, or manufacturing your equipment.

1. Avoid short-circuiting of the battery. Do not connect the positive and the negative terminals with a wire or other metal items, as this will cause a large flow of current through the battery. It may damage the battery.
2. Do not attempt to take the battery apart or subject to pressure or impact. The parts of the battery will be damaged, when the battery has ruptured, heat may be generated or fire may result. The alkaline electrolyte may harm the skin or eyes or damage clothing upon contact.
3. Do not heat or incinerate the battery. The battery may swell or rupture and it may explode or release alkaline electrolyte.
4. Do not solder directly to the battery. It may damage the battery.
5. If any abnormally or problem is found while using the battery, stop its use, and advise the RS team. Please do not attempt to fix or take the battery apart.
6. Charge the battery only with a charger qualified a charger that meets our specified conditions. Charging without a proper control will cause overcharging and damage the battery. Overcharging can cause battery to capacity drop, short life, leakage, overheat, burst, or even catch fire.
7. Discharge cutoff at 1.0V per cell is required. However, 1.05V/cell cutoff voltage is suggested for multi-cell battery pack.
8. Do not operate the cells/battery packs in a sealed case. A pressure vent is required.

**Note IEC61951-2 ED3 Endurance in cycles :**

**The battery is capable of 500 cycles under the following conditions:**

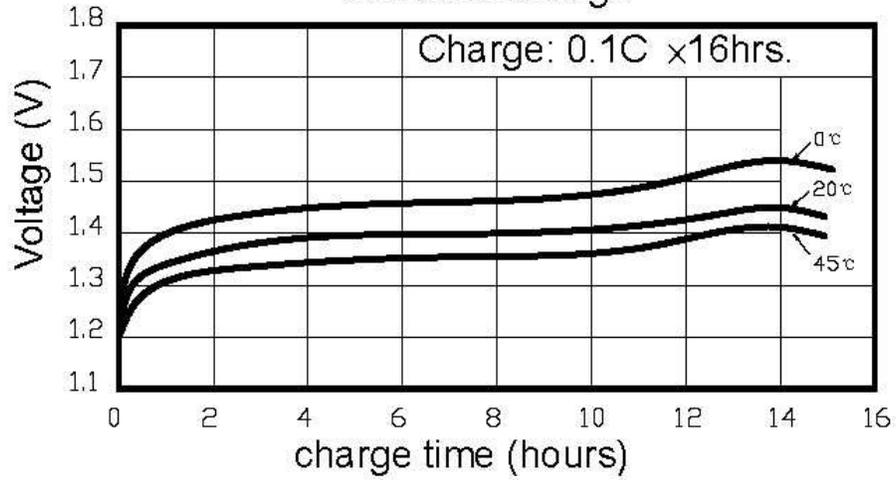
Cycle number	Charge	Rest	Discharge
1	0.10CmA for 16 hrs	none	0.25CmA for 2 hrs 20 mins
2~48	0.25CmA for 3 hrs 10 mins	none	0.25CmA for 2 hrs 20 mins
49	0.25CmA for 3 hrs 10 mins	none	0.25CmA to 1.0V/cell
50	0.10CmA for 16 hrs	1-4hr(s)	0.20CmA to 1.0V/cell

Cycle 1 to 50 shall be repeated until the discharge duration on any 50<sup>th</sup> cycle becomes less than 3 hrs.

The actual cycle life depends on the operating temperature and cycling conditions.

## Typical characteristics

Standard charge



Rapid charge

