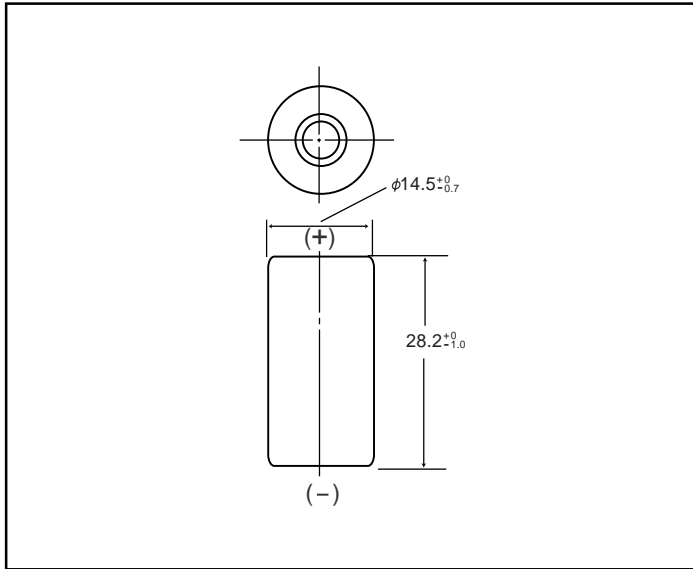


# NICKEL CADMIUM BATTERIES: INDIVIDUAL DATA SHEET

## P-30AAR 2/3AA size Type: R

Dimensions (with tube) (mm)



### Specifications

	mm	inch
Diameter	14.5 +0/-0.7	0.57 +0/-0.03
Height	28.2 +0/-1.0	1.11 +0/-0.04
Approximate Weight	Grams	Ounces
	12g	0.42

Nominal Voltage		1.2V	
Discharge Capacity*	Average**	330mAh	
	Rated (Min.)	300mAh	
Approx. Internal impedance at 1000Hz at charged state		20mΩ	
Charge	Standard	30mA (0.1It) x 16 hrs.	
	Rapid***	300mA (1It) x 1.5 hrs.	
Ambient Temperature	Charge	Standard	°C
			°F
	Rapid	0°C to 45°C	32°F to 113°F
		10°C to 40°C	50°F to 104°F
Discharge		-20°C to 65°C	-4°F to 149°F
Storage	< 2 years	-20°C to 35°C	-4°F to 95°F
	< 6 months	-20°C to 45°C	-4°F to 113°F

\* 0.2It discharge capacity after charging at 0.1It for 16 hours.

\*\* For reference only.

\*\*\* Refer to "Charge Methods for Ni-Cd Batteries"

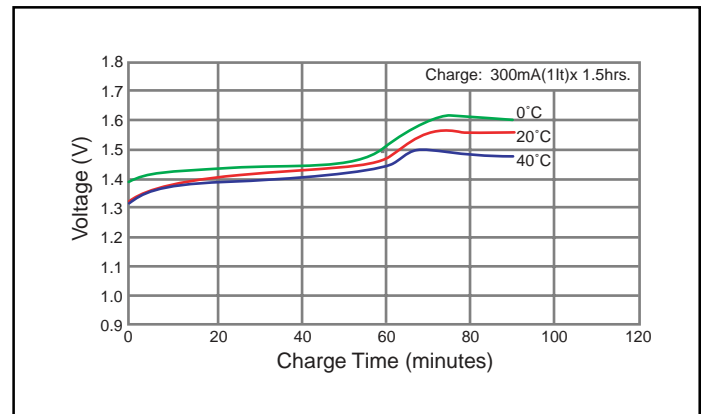
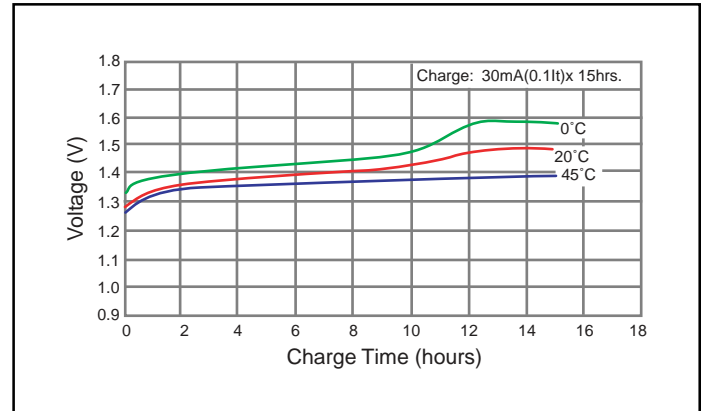
Battery performance and cycle life are strongly affected by how they are used. In order to maximize battery safety, please consult Panasonic when determining charge / discharge specs, warning label contents and unit design.

**Note:** [It] was previously expressed as [C]. [It] is an IEC standard expression for the amount of charge or discharge current and is expressed as:

$$It(A) = Cn(Ah)/1h.$$

- [It] is the reference test current in amperes
- [Cn] is the rated capacity of the cell or battery in Ampere-hours.  
n = the time base [hours] for which the rated capacity is declared

### Typical Charge Characteristics



### Typical Discharge Characteristics

