

# ACR SmartButton

## Product Specifications



The ACR SmartButton is a miniature-sized temperature logger that is extremely low-cost and easy to use. Because of its small size and low-cost, you can purchase tens or hundreds of them for multiple-site temperature monitoring. To get you started, purchase the SmartButton Starter Pack. It includes one SmartButton, an Interface cable, the SmartButton Reader software, and a mini manual. So simple and easy to use, anyone can start data logging today!

### APPLICATIONS

Food processing verification, pharmaceutical storage, laboratories, transportation of temperature-sensitive goods, equipment run time, HVAC system testing and balancing, etc.

### GENERAL SPECIFICATIONS

Size:	17.35mm diameter x 5.89mm height (0.68" x 0.23")
Weight:	4 grams (0.14 ounces)
Case Material:	Stainless Steel
Battery:	3.0 volt Lithium – Approximate 10 year battery life using 20 min sample rate at 15°C (*See product lifetime table for more information)
Resolution:	8-bit (1 part in 256)
Mounting	User selectable (magnetic backing, plastic plate mount, angled blue hard plastic or self-adhesive backing material)
Clock Accuracy	± 2 minutes per month from 0° to 45°C (32° to 113°F)
Sampling Methods:	Continuous (First-in, First-out) or Stop When Full (Fill-then-stop)
Operating Limits:	-40°C to 85°C (-40°F to 185°F)
PC Requirements:	Pentium® 75 (Pentium® II or faster recommended) running Windows® 9X/NT/2000/XP with at least 16MB RAM (64MB RAM strongly recommended), color monitor, 16bit or higher color graphics card, printer, pointing device and one free USB or serial port depending on interface
Software Requirements:	SmartButton Reader
Communication:	USB/ACR SmartButton Interface or RS232 Serial/ACR SmartButton Interface

### TEMPERATURE SENSOR SPECIFICATIONS

Type:	Silicon
Range:	-40°C to 85°C (-40°F to 185°F)
Accuracy:	±1.0°C from -30°C to 45°C (± 1.8°F from -22°F to 113°F) ±1.5°C from 45.5°C to 85°C (± 2.7°F from 114°F to 185°F)

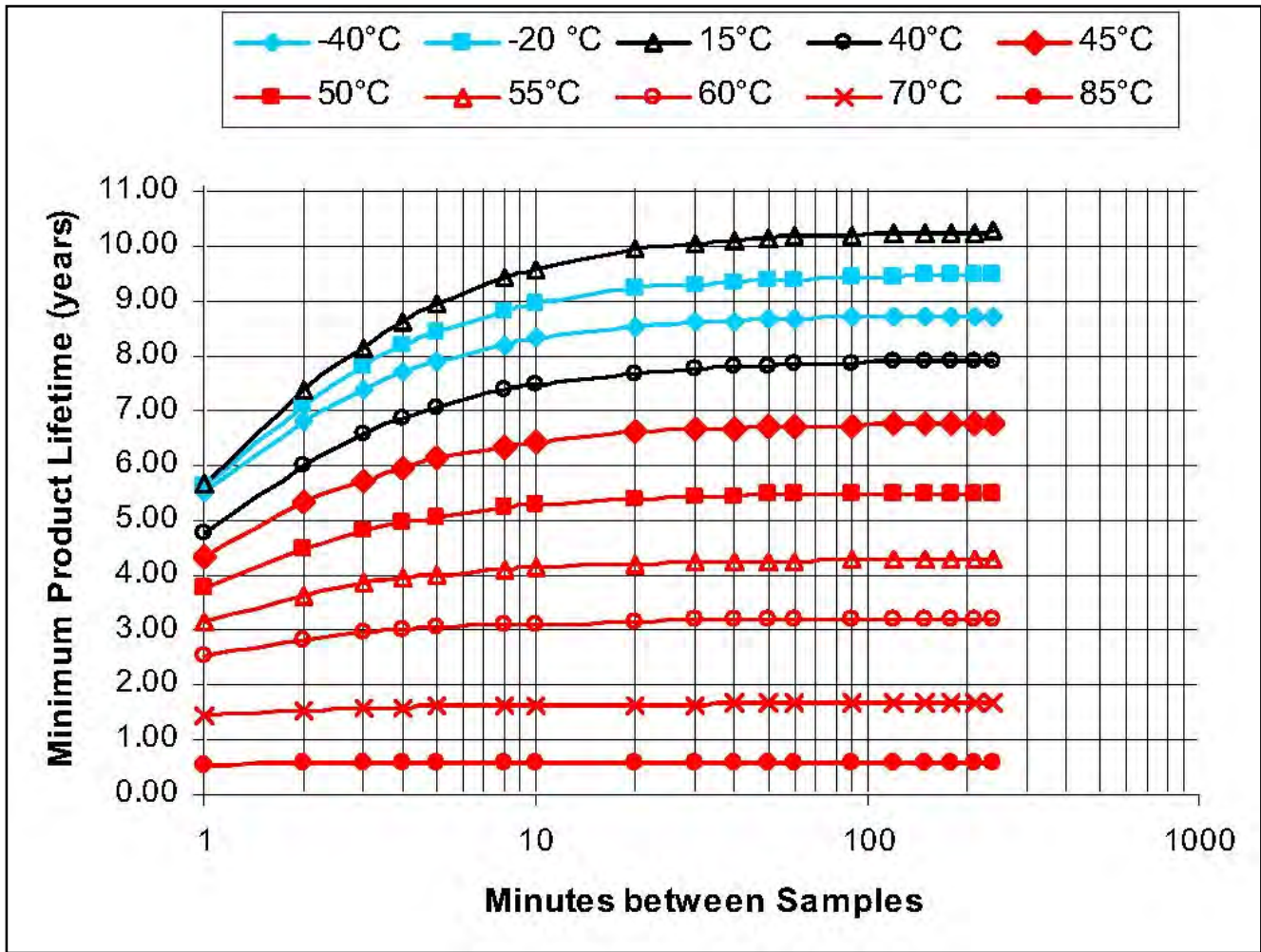
### ORDERING INFORMATION

Item	Cat#:
SmartButton (Single)	01-0180
SmartButton Starter Pack (USB)	01-0182
SmartButton Starter Pack (Serial)	01-0181

**WARRANTY: 1 YEAR**

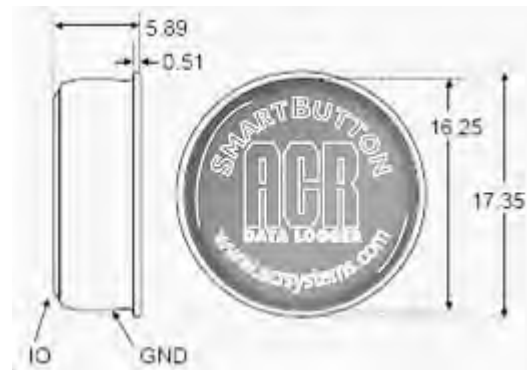


MINIMUM PRODUCT LIFETIME vs SAMPLE RATE AT DIFFERENT TEMPERATURES



SPECIAL FEATURES

- ACR SmartButton measures temperature in 0.5°C increments
- Logs up to 2048 consecutive temperature measurements in internal memory
- Programmable temperature-high and temperature-low alarm trip points
- Records up to 24 time stamps and durations when temperature leaves the range specified by the trip points (12 periods for too hot and 12 for too cold)
- Automatically wakes up and measures temperature at user-programmable intervals from 1 to 255 minutes
- Unique, factory-lasered and tested 64-bit registration number (8-bit family code + 48-bit serial number + 8-bit CRC tester) assures absolute traceability because no two parts are alike
- Chip-based data carrier compactly stores information
- SmartButton can be accessed while affixed to an object



All dimensions shown are in millimeters