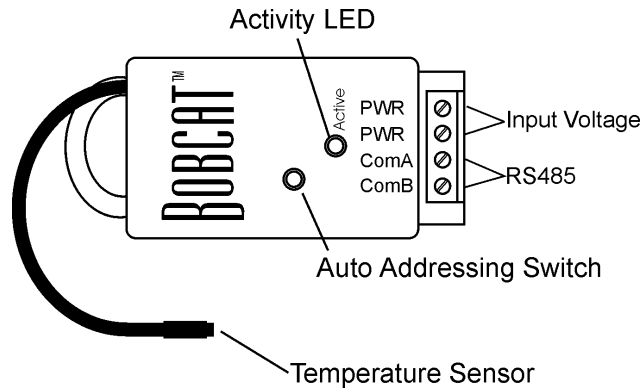


Temperature Bobcat™



Introduction

The Temperature Bobcat™ is a single point module providing temperature readings from -20°F to 170°F.

Specifications

Power:	Input Voltage	9 - 12V DC or AC
	Input Current Max	30mA
Dimensions:	1.3"W x 2.5"L x 0.6"D	
	Probe Cable	18"
Operating Temperature:	Bobcat™	32°F to 158°F
	Sensor	-20°F - 170°F
Resolution:		1°F ± ½°

Setup

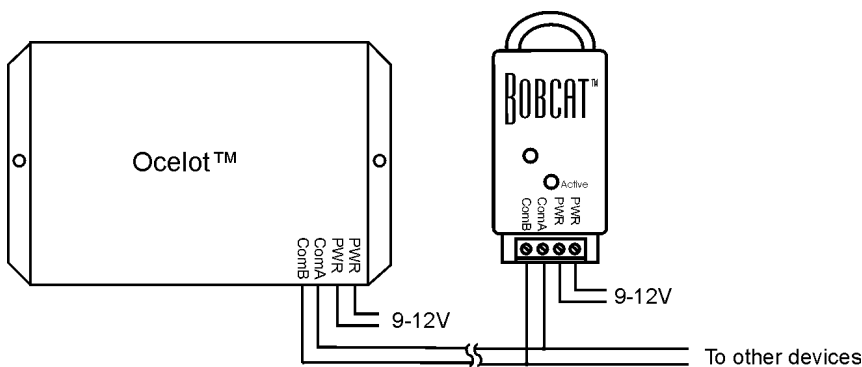


Figure 1. Typical Wiring Diagram

Note: The Bobcat™ may be used outdoors but must be installed in an area so that it will not get wet!

Operation

LED Codes

ON solid – Bobcat™ has not been addressed

Slow Blink – Bobcat™ has a valid address

Fast Blink – Auto address mode active

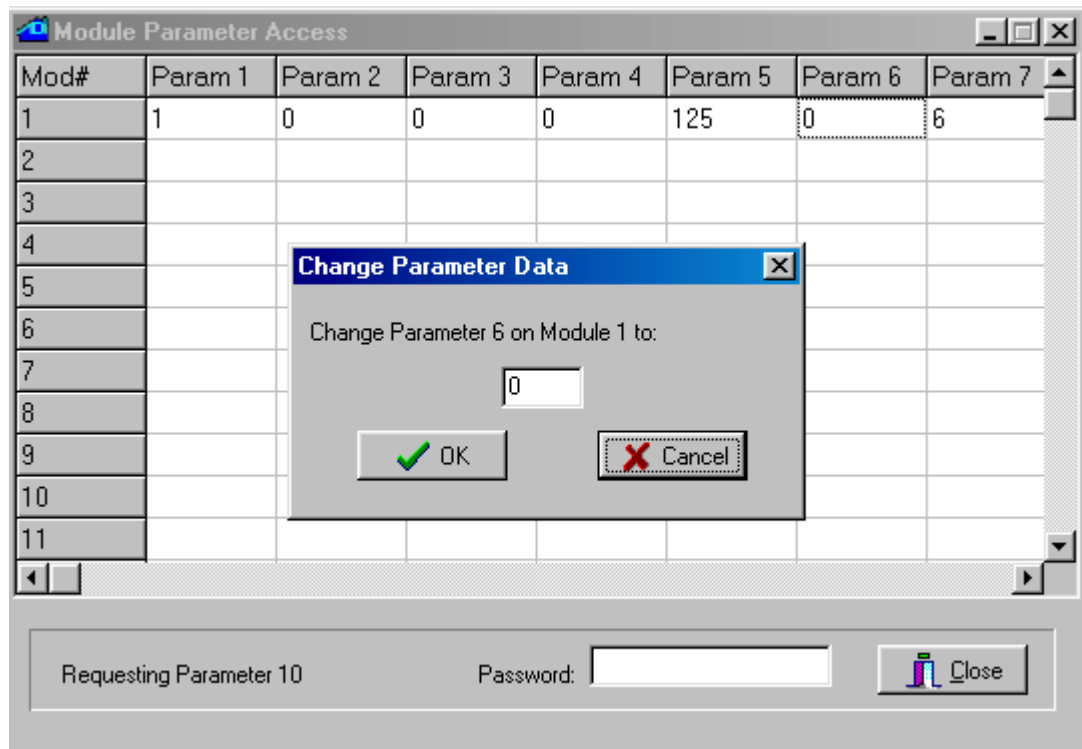
On solid, then Rapid blink - ADICON™ communications active

Parameter	Function
1	Module Address
5	Gain (do not change) – default 128
6	Positive Temperature Offset
7	Negative Temperature Offset

Table 1. Temperature Bobcat™ Parameters

The Temperature Bobcat™ is calibrated at the factory but small temperature adjustments may be made using parameters 6 and 7. Parameter 6 is used to increase the temperature reading by 1/16th of a degree increments and parameter 7 will reduce the reading by 16th of a degree increments. The maximum value for parameters 6 and 7 is 255 or 15.9735 degrees. Either parameter 6 or 7 should be 0. If both are non-zero then the value of parameter 7 will reduce the effect of parameter 6. For example, if parameter 6 is 80 (+ 5 degrees) and parameter 7 is 32 (-2 degrees) the temperature reading will only be increased by 3 degrees.

C-Max™ is used to change a parameter value. Below is a sample screen of the Module parameter utility. For more information about changing module parameters see the application note *Changing Module Parameters*.



Viewing Bobcat™ data using C-MAX™

The CPUXA access screen of C-Max™ now has a data field to show the decimal value of data returned by a module. To view the data field, move the horizontal scroll bar all the way to the right. See the sample screen below. Data shown for a Bobcat™ module will be offset by 100, that is, the value shown is 100 greater than the actual data.

The screenshot shows the 'CPUXA Access' window with the 'Module Utility' tab selected. On the left, there is a list of commands for uploading module parameters. On the right, a table displays data for modules 1 through 9. The 'Data' column for module 1 shows the value '123'. Below the table, status information is displayed, including 'Waiting for Data' and a value of '112'.

Mod#	I/O# 12	I/O# 13	I/O# 14	I/O# 15	Data
1	OFF	OFF	OFF	OFF	123
2					
3					
4					
5					
6					
7					
8					
9					

Additional interface elements include: 'Firmware: V8.23/15', 'Application: V2.85', 'TX RX' status indicators, 'Feb 19 2001', '9:52:20 AM', 'Sunrise 6:58 AM', 'Sunset 5:56 PM', and a 'Close' button.

Accessing the Bobcat™ data

Following is an example of turning on the air conditioner when the temperature exceeds 80 degrees.

The screenshot shows the 'C-Max Control Wizard - Code Editor V1.01' window. It displays a logic rule table with two lines: 'If Bobcat 3 Data becomes > 80' and 'Then Module 1 Point 5 Turn ON'. The 'Comments' column contains 'If the Temperature Exceeds 80' and 'Turn on AC'. Below the table, there are configuration options for the function type, including 'Compare Bobcat Data', and a 'Compare Bobcat Data' section with a 'Bobcat Address' field set to '3' and a 'Data' field set to '80'.

Line#	Program Text	Comments	Reference
1	If Bobcat 3 Data becomes > 80	If the Temperature Exceeds 80	0064-0300-0084
2	Then Module 1 Point 5 Turn ON	Turn on AC	0400-0115-0001
3			
4			
5			
6			
7			

Function Type: IF, THEN, ELSE, AND, OR, END

Compare Bobcat Data: Bobcat Address: 3, Data: 80, Enter