



Technical Note: 10000324

## Communication Protocol Differences Between the MDC-360 and MDC-360C

Interfacing the MDC-360C to a computer is very similar to the MDC-360. However, there were a number of features added to the 360C which required new and/or modifications to parameters which affected many of the computer interfacing instructions. The message protocol is still the same. The following is a summary of all the modified interface instructions. Please refer to the MDC-360C manual section 11.9 for detailed information.

### **Code# 2&3**

Send and receive utility – Two parameters were added increasing the number of bytes from 20 to 22.

### **Code# 6&7**

Send and receive material – A number of parameters were added to allow for more sensors and multi-sensor averaging. The rate ramp start and stop parameters were converted from an absolute thickness to a percentage of the layer thickness. The total number of bytes for the material parameters increased from 111 to 136 bytes.

### **Code# 18&19**

Send and receive source setup – The 360C increased the number of sources from 4 to 6 so the total length of these commands increased from 36 to 54 bytes. The individual parameters are identical except the maximum range on the number of pockets parameter was increased to 16.

### **Code# 20&21**

Send and receive sensor setup – The 360C increased the number of sensors from 4 to 6 so the total length of these commands increased from 24 to 36 bytes. The individual parameters are identical except the maximum range on the number of crystals parameter was increased to 16.

### **Code# 22&23**

Send and receive input – The input type parameter was change from 1 to two bytes so the total length of the input parameters increased from 20 to 21 bytes. Also, the input name now comes before the type.

### **Code# 24&25**

Send and receive output - The output type parameter was change from 1 to two bytes so the total length of the output parameters increased from 44 to 45 bytes. Also, the output name now comes before the type. There were a number of sub-conditions added to the MDC-360C.

**Code# 26&27**

Send and receive action – These instructions are the same except there were a number of new action types and sub-conditions added to the MDC-360C.

**Code# 28**

Send controller status – The length of these instructions increased from 33 to 43 bytes to account for the increase number of sources and sensors.

**Code# 30**

Send run-time values - A number of run-time values were added to this command increasing the number of bytes from 35 to 161 bytes.

**Code# 31**

Initiate automatic data logging – A number of new run-time values were made available for this command. The 360C expects 6 bytes instead of 1 to select the values sent.

**Code# 39**

Send run-time value – A number of new run-time values were made available for this command.

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Related Products:	<a href="#">MDC-360C</a> , <a href="#">MDC-361C</a>
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Notes:	This Tech Note also applies to: MDC-360 (obsolete), MDC-361 (obsolete).