



1. Introduction

The test step function “Read bar code / data matrix code over RS232” allows to receive a bar code / data matrix code (DMC) from a bar code / DMC scanner connected to a COM port.

This function should be used for reading barcodes in automated systems. The scan process can be triggered by sending a request command.

For triggering the scan process by pressing the data button on the hand scanner, we recommend the use of the function “Set current reference information dataset” (SFct007.dll).

This function can only be used in a ComGage test order.

2. Configuration

The test step function is created within a test step. By clicking the Setup button, the following dialog will be opened :

Caution :

All received bytes, that have already been received at the COM port, when this function is executed, are deleted.

This dialog allows to configure the following settings :

Mode

The following operation modes are available for this function :

- Scan bar code and store in reference information
- Scan bar code (the barcode is scanned in test step Sx)
- Store bar code in reference information (in a later test step the barcode is stored)
- Send measuring value of Characteristic Cx

Format : “Cxxx±yyyyyyyyyy<cr>”

xxx = Characteristic number

yyy... = Measuring value

→ If a PLC is connected that transmits the reference information datasets, instead of a barcode scanner, ComGage can sent measuring values to the PLC.



COM-Port

Select the COM port (COM 1..128) to which the bar code scanner is connected. Non-available COM ports are marked with (*).

Baud rate

Select the baud rate to which the bar code / DMC reader is configured. Consult the barcode / DMC reader's manual for more information.

Parity bit

Select the configured parity bit option of the bar code / DMC reader (No / Even / Odd). Consult the barcode / DMC reader's manual for more information.

Number of data bits

Select the number of data bits to which the bar code / DMC reader is configured. Consult the barcode / DMC reader's manual for more information.

Request command

If the bar code needs to be requested from the bar code / DMC reader by a specific command, you need to enter the command here (e.g. LON<0d>). <xx> stands for characters with ASCII code xx, where xx is a hexadecimal value. Consult the barcode / DMC reader's manual for more information.

Note :

The function is only ready-to-receive between the transmission of the request command and the end of the timeout time. In automated systems, this command triggers the scan process. As this moment may be difficult to hit with a hand scanner, we recommend using the function "Set current reference information data set" (SFct007.dll) in this case.

The field *Request command* can stay empty, too. Then, the timeout time starts when the function is called.

End character / Length

You can either select an end character for the received bar code / DMC or define a specific length of the received bar code / DMC.

If the end character is detected, the function indicates that a barcode / DMC has been received and the characters before the end character are used as reference information dataset (see below).

If a specific length for the bar code / DMC reception is configured, the function counts the number of received characters and indicates that a barcode / DMC has been received if at least <length> characters are received and uses the received characters as reference information dataset (see below).

Timeout for reception

Enter the timeout value (in seconds) for the call of this function. If the bar code is not received within the timeout time after calling this function, the output register (see below) will be set to the related error code (see below).

Minimal data code length

The function indicates success, if the length of the received bar code / DMC is at least this number.

Maximal data code length

The function indicates success, if the length of the received bar code / DMC does not exceed this number.



Register for output that code was received correctly

Register which contains the function result after the function was executed.

(0) = read success

(1) = timeout exceeded

(2) = received bar code / DMC is identically to previously received bar code / DMC

Reference information type to store the data code

Enter the reference information type to which the received bar code / DMC is stored after being received successfully (result register = 0 or 2).

Store received code in text file / Wait till text file was deleted

If these options are activated, the test step function writes the received code into a text file and waits until the text file was picked up by another system (can be used with the mode “Scan bar code”).

The text file is placed in the *Data directory for converted Measuring data*.

The name of the text file is composed in the following way :

<test order>_<year><month><day>_<hour><minute><second>.txt

The text file contains : in line 1 : Order Number
 in line 2 : received barcode

Debug

If this option is activated, debug messages can be displayed by the Microsoft Sysinternals software “DebugView”.