

## Generating Data Reports from BlackBelt & I-28

*Purpose: This application bulletin will outline how to generate measured data reports from the I-28 and Blackbelt Leak Test Instruments.*

There are different ways to communicate with the Blackbelt and I-28 leak test instruments. These instruments are capable of generating reports, two-way communications, and streaming data. Both the instruments are capable of generating a variety of reports, for example, and these reports may be accessed using an RS232 connection, an Ethernet connection, a USB connection, or email. Two-way communications—including the ability to change test parameters and adjust settings—can also be established with Blackbelt and I-28 instruments using RS232 or Ethernet connections. Finally, collected data can be streamed using RS232 or Ethernet connections.

### Instrument Communication Functionality:

	Generate Data Reports	Streaming Data	Remote Instrument Control	Email Alerts
RS232	YES	YES	YES	NO
Ethernet	YES	YES	YES	NO
Email	YES	NO	NO	YES
USB	YES	NO	NO	NO

### Reports

To generate a report, the first step is to navigate to the main menu and select the Global Config icon.



Next, determine the communication mode that will be employed to access the report and **select the corresponding icon** for either RS232, Ethernet connections, a USB connection, or email.



Once the communication mode has been selected, users then select one of several types of reports. Possible selections include: All Results, Global Config, Autosetup Info, and more.

**Select Report** and then **choose** the type of report that you would like to generate.



### How to Interpret the Results Data String in a Report

Once a user selects a communication mode and report type, the instrument then reports the stored data as a results data string. The data string may initially appear confusing because it represents several different variables.

The key to understanding a results string is to understand how the string is arranged. Each data string represents the parameter values below, and each value in the string is separated by a space.

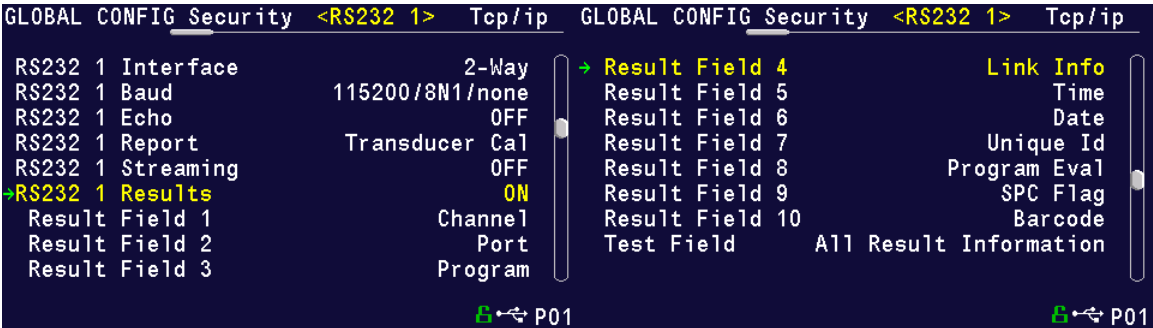
Consider the following sample data:

C01 N1 P70 R-- 10/18/12 16:26:44.070 0000015121 A - No\_barcode PLR P LR -0.040792 sccm PL 0.001001 dpsig Pt 3.150548 psig EDC 0.000000 sccm PQ 0.022352 sccm QL 0.000303 dpsig QP 3.150548 psig FPR 3.152545 psig

The first 10 parameters are identified below.

Channel	-	Port	-	Program	-	Link Info	-	Time	-	Date	-	Unique ID	-	Program Eval	-	SPC Flag	-	Barcode
↓		↓		↓		↓		↓		↓		↓		↓		↓		↓
C01		N1		P70		R--		6:26:44.070		10/18/12		0000015121		A		-		No_barcode

These 10 parameters can be individually configured as follows. First go to Global Config. Once in this screen, select Results and choose ON. Once this parameter is turned on, the Result Field data parameters show on the screen.



The Test Field parameter may be set to “All Result Information” or “First 2 Test Results.” The “First 2 Test Results” will send the two primary results. The following table shows the format of the Test Result Data.

Parameter	Number of Characters	Format	Example Text	Description of Example
Channel #	4	C##	C01	Channel 1
Port #	3	N#	N1	Port 1
Program #	4	P##	P01	Program 1
Link Information	4		R--	No Link
Time	13	HH:MM:SS.XXX	16:15:14.123	16 hours, 15 minutes, 14.123 seconds
Date	9	MM/DD/YY	40179	January 01,2010
Unique Id	11	#####	0000098353	Unique test number
Program Evaluation	3	#	A	Accept
SPC Flag	2	#	*	SPC Test Data Result
Barcode	41	1...40	12345	Barcode Data
<b>Test Field</b>	<b>First 2 Test Results</b>			
Test Type	8	###	PLR	Pressure Decay Leak Std
Test Evaluation	2	#	P	Pass
Test Data 1	22	TDI Data Unit	LR 0.123456 sccm	Test Data Identifier - Value - Unit
Test Data 2	22	TDI Data Unit	LR 0.123456 sccm	Test Data Identifier - Value - Unit
TAB				Tab
TAB				Tab
CR				Carriage Return
LF				Line Feed
<b>Test Field</b>	<b>All Result Information</b>			
Test Type	8	###	PLR	Pressure Decay Leak Std
Test Evaluation	2	#	P	Pass
Test Data 1	22	TDI Value Unit	LR 0.123456 sccm	Test Data Identifier - Value - Unit
Test Data 2	22	TDI Value Unit	LR 0.123456 sccm	Test Data Identifier - Value - Unit
Test Data X	22	TDI Value Unit	LR 0.123456 sccm	Test Data Identifier - Value - Unit
TAB				Tab
TAB				Tab
CR				Carriage Return
LF				Line Feed

For more information, please reference the chapter on communication in the user manual.