PC or Not CPP

This question has been asked many times.

Why should I buy a CPP data logger when I can get a PC for much less and have total control over the software and how it operates?

Consider the following:

Cost:

Purchase price of a PC		$1250
Purchase a software package operate analog/digital and serial data collection		$1500
Purchase PC cards for:		
16 isolated A/D channels with 16 bits + sign resolution		$595
16 channel digital I/O board		$195
board with SS relays		$295
Man hours to learn the software package 80 hours at $40/hour		$3200
Now add 40 hours of engineering time per serial driver. Lets' say you only have ten(10) different serial instruments. 10 x 40 x $40		$16,000
COST of PC	**$23,035**	
Compare that to the cost of a CPP	approx.	$4000
Learning time. <16 hours at $40		$640
Man hours to write serial drivers. 0		$0
COST of CPP	**$4640**	

Operating environment:

The CPP is capable of functioning in considerably more harsh environments than a PC because it is designed with extended temperature range components, has surge suppression on all I/O and every board has a silicon coating to guard against chemical agents.

Reliability:

No doubt, PCs have come a long way in reliability, however, they still have moving parts such as the hard drives and floppy disks and they still lock up for no apparent reason. The CPP on the other had is 100% solid state. As any engineer knows, this translates into many orders of magnitude improved reliability. The CPP also has surge protection on all I/O including all serial ports, all A/D channels, and all digital input/output channels. The PC and add on cards do not generally provide surge protection on any I/O except maybe the serial port.

Ease of configuration:

Now let's consider another very important cost aspect, **unit configuration**. With the PC , one must purchase a software package that interfaces with all of the associated add on cards. The user must configure the unit to collect data, then either write code or configure the software to perform rolling averages, sigma theta, linearize data, perform calibrations, and assign appropriate data status to the data. He will also have to know how to write serial drivers for all of the instruments.

The CPP offers a robust set of over 15 easily configurable modules. These range from Password, channel initialization,(which includes a generous selection of serial drivers), Boolean functions, relay sequences, met parameters and many more. The configuration is accomplished by a simple question/answer session with the user.

Learning Curve:

The learning curve for the CPP is a matter of hours, not days or weeks or months because it was designed to be configured by a simple question/answer session with the user.

Consider the complexity of operation:

Your programmer must write code that handles serial broadcast inputs, controls mass flow controllers, controls instrument calibrations, flags data status appropriately, responds to user controlled manual calibrations, interleaves data collection with user diagnostic command requests, respond to polling software over multiple ports simultaneously, poll multiple instruments simultaneously, perform multiple averages, and be user configurable so a user can select A/D input or serial input to broadcast input etc. etc.. etc.. **HAVE I MADE MY POINT?**

Who is going to write the serial drivers

that communicate with all of your analyzers and met gear? **WE DO!!** Unless your equipment is designed by Zimbabwe's for Zimbabwe's, we will write the driver at no cost to you. And we write it quickly.

How can we write a serial driver so quickly?

This is the information age folks, and we use it. If you have an instrument that we do not sport a serial driver, then simply fax or email us a copy of the commands and expected responses, then connect an external modem to the analyzer. We will do the rest. We will call the unit, issue commands, analyze the responses, then write and test the new driver. Once we are satisfied that all works well over the phone, we will email you or your local support representative a copy of the new object code so a set of EPROMS can be programmed with the new driver included.

Nice concept huh?! And quick by normal standards!!

In conclusion, the CPP costs less, is easier to use, operates in harsh environments, is 100% solid state, has a robust set of serial drivers currently that is growing every day.

So now, I ask YOU, PC or CPP?