



P3025

COMPUTER CONTROL SOFTWARE AND DATA LOGGING INTERFACE FOR IBM PC/XT

INTRODUCTION

Cussons P3025 Computer Control software and data logging interface for use with an IBM PC/XT/AT or equivalent comprises of a half length expansion board which plugs into any expansion slot on the PC and the relevant software. The software allows the data to be acquired and stored onto disk, and also allows it to be converted into a form suitable for entering into a spreadsheet where various calculations can be performed. The software allows active PID control to any mathematical algorithm in real time.

COMPATIBILITY

The software is compatible with the following process control equipment supplied by Cussons:

- ◆ P3010 Flow Control Apparatus with P3011
- ◆ P3015 Level Control Apparatus with P3017
- ◆ P3020 Acidity (pH) Control Apparatus with P3021
- ◆ P3035 Temperature Control Apparatus

HARDWARE REQUIREMENT

IBM PC/XT/AT or 100% equivalent with 640K of memory, colour graphics adaptor, 5.25" or 3.5" floppy disk drive and spare expansion slot for acquisition board.

GENERAL DESCRIPTION

The PC expansion board comprises a high speed 12 bit analogue to digital converter with a conversion time of 10 μ seconds, giving a throughput of data on a single channel of up to 90 kHz. It can accept bi-polar or uni-polar signals of up to $\pm 10V$ or +10V respectively. The board also has three 16 bit counter/timers which can be used to control sampling or be used to measure frequencies or generate time delays.

Data from the board may be acquired by user programs written in BASIC or acquired by spreadsheet data acquisition software provided.

The software package supplied will allow data to be acquired in real time, stored to disk, printed out or loaded into a spreadsheet where calculations may be performed using any standard mathematical functions including scaling, ranging and rounding. Output from the spreadsheet may be used to control the process thus allowing any PID or other mathematical algorithm to be used in real time control situation.

Within the software package facilities for real time plotting of response graphs is provided for both on screen presentation and for downloading to external printers and plotters.

The software is supplied on both 5.25" and 3.5" floppy disks. A comprehensive user manual is included.