# PC5200
# An Emulator to Replace Aydin Display Generators

PC5200 is a software emulator of the Aydin 5215 and 5217 display generators and the 5219 display system that runs on PC hardware. The emulator provides full support of the standard 5215 and 5217 command sets and support for data trending extensions. It supports all the standard Aydin character sets and additional custom character sets.

Why use PC5200? The Aydin display generators are still widely used as operator interfaces for control systems in power plants and other industrial settings.  However, these devices have been out of production for many years, and it is becoming more and more difficult and expensive to maintain them as spare parts and repair expertise become more and more scarce. PC5200 allows replacing failing display generators with standard, low-cost PC hardware.

Even when the old display generators continue to function acceptably, a maintenance problem arises on account of the difficulty and expense of finding replacement slow-scan monitors for them. Slow-scan CRT and LCD monitors remain available, but only from a few vendors; and these vendors tend to charge high prices for these specialty items. After replacing an Aydin display generator with a PC running PC5200 it becomes possible to use standard, low-cost PC monitors as display devices.

PC5200 is available as a native Win32 application and as a Linux application.  PC5200 for Windows is especially well suited for providing an auxiliary "window" into the control system, whether from a control engineer's desk in the plant, or from a remote location.  It features a network connectivity as well as direct connectivity to the host system.  It also provides a customizable on-screen keyboard that fully replicates the Aydin keyboard.

PC5200 for Linux is especially well suited for use on dedicated and/or embedded PC hardware to replace display generators in mission-critical applications.   This version is available bundled with a rugged low-cost small-form factor computer and Linux OS.

## Features

- Support for host communications via RS-232 ports
- 80 column x 48 line text display format is standard (other formats supported)
- Orange, double high, blink, reverse video and low intensity attributes supported
- Character sets supplied include standard alphanumeric and punctuation symbols (05-5014A and 05-5125), standard graphic symbols (05-5014A and 05-5053A),  standard large Greek letters and large graphics, numeric and punctuation symbols (05-5054 and 05-5056A), standard large upper and lower case alphanumeric symbols (05-5054 and 05-5058B), additional graphic symbols (471-5212)
- Standard PC keyboard keys mapped to 5215/17 keyboard keys
- On-screen soft keyboard (Windows version)
- Full support for DTCS (trend graphs)
- Support for 4 text display channels and 4 DTCS channels
- Support for PS/2 mouse for operator cursor control
- Support for screen printing
- Menu system for setup

# Sample Screens

## Screen 1 — PC5200 Terminal Emulator V1.01

File   Host   Options   Printer   Help

PAGE 1 OF 1

DEBUT TARGET CONTROL

DATA BASE READ ERROR
30 NOV 94
15:35:05

AR409:1
A C3'S    77 PPM
B C5'S     0 PPM
C BD13   45.5 %

45 C

FLARE
-1  HIC410
FLARE
-1  HIC409

FT490:K
-2.12?KLB/HR
GA2444

HARD TGT INACT
FIC434  LOCAL
M  70.5
S  69.3
C  69.2 ON
---- FV434

*********
*BLOWING*
*MAX 98%*
* 71
*********

FA2408

FI427
150.50?KLB/HR
DEPROP  63

34.5 %

SW

SOFT TGT INACT
TIC415  LOCAL
M 62.9
S 63.2
C 63.2  ??
----

64

PRESS TGT
PRC417  LOCAL
M  62 PSIG
S  62
C  62 ON
---  _

DA2407

EA
2425

25

GA2410

FIC435
M 22.1
S 22.1

61 %

PDI4122
3.14 PSI

LIC420
M  51 %

GA2201

42  %

FIC433
M  77.0 KLB/HR
S  76.1

PI4122A/B
TOP 59.6 PSIG
BOT 62.8 "

106.69

FIC496
40.00?
KLB/HR

22 %

EA
2426

GA
2411

AR414:1:A
0.535

EA
2427

HV450

C4 TO SPHERE

C4 TO SARNIA
OPEN

GA2442

FR232   144.9 KLB/HR
DPG
AR414:2:A
0.304 MOPCNT

24
DISPLAY 323
DA2440

FA2435
DISPLAY 259

REV  SEP22/94

248

## Screen 2 — PC5200 Terminal Emulator V1.01

File   Host   Options   Printer   Help

AREA 72 COMPUTER
TOTAL CPU
LOAD

8 HOUR TREND <2 MIN>   12/OCT/95  12:24:03

33.09
20.0    100.0

51.60
20.0    100.0

72.14
0.0    80.0

71.24
60.0    80.0

1200

1100

1000

900

800

700

600

500

20.0   100.0   20.0   100.0   0.0   80.0   60.0   80.0