PCS

PLC on a Chip® Control System

- Supports up to 128 Digital Inputs / 128 Digital Outputs
- Analog Inputs
- Analog Outputs
- 2 PWM Output Channels
- 10VAC or 10-30VDC Input Power
- Sychronous Serial Interface (SSI) Port
- 2 CAN Network Ports
- J1939 Connectivity
- Modbus Slave Supported
- Multi-purpose Serial Port (RS232 / RS422 / RS485)
- 2 High Speed Counter Inputs (100Khz max.)
- Programs with EZ Ladder® Software
- DIN Standard Rail Mounting

Designed for speed, the PCS series of programmable logic controllers replaces the High Density Bear Bones product while adding expanded features and versatility. These features include analog I/O capabiliy, expanded communication ability via a CAN network with J1939 support, Sychronous Serial Interface (SSI), truly high-speed counting, and broad frequency range Pulse Width Modulation (PWM) outputs. Based on the patented* PLC on a Chip® technology, the controller is easy to apply and program using the EZ Ladder PC based software.

The PCS controllers are ideal for small system control and monitor applications, particularly in instances where higher speeds or positioning accuracy is required. The SSI port allows direct reading of absolute encoder outputs for increased operating speed.

Specifications:

Operating Temp: 0-60° C
Digital I/O: Up to 128 in / 128 out using HDIO expanders
Memory: 256K FLASH, 12K RAM
Serial Ports: 1ea) RS232 Programming Port
Maximum Baud Rate: 57600 bps
1ea) RS232 / RS422 / RS485
Maximum Baud Rate: 115.2 Kbps
Modbus: Slave
Networking: 2 CAN Bus Interface Ports
J1939: Read Only
Counters: 2 Channels, Count Up, 100KHz Max.
PWM Outputs: 2 Channels, Open Collector Output
1.436 Hz to 47.058KHz

Analog Inputs: 6 Channels, 10-bit Resolution, rated 0-5VDC or 0-20mADC
Analog Outputs: 4 Channels, 8-bit Resolution, rated 0-5VDC or 0-20mADC
Power Requirements: 10 VAC or 10-30VDC, 115VAC with Optional Transformer
I/O POWER: With 10VAC Power, +VA (12VDC) @ .5A Max, 5VDC @ .5A Max.
With DC Input, +VA (equal to power in) @ 6 Watts Max, 5VDC @ .5A Max
Real Time Clock: Month, Day, Day of Week, Year, Hour, Minute and Second

NOTE: *A User's Manual is available for download from our website: www.divelbiss.com*

*Patent 7,299,099

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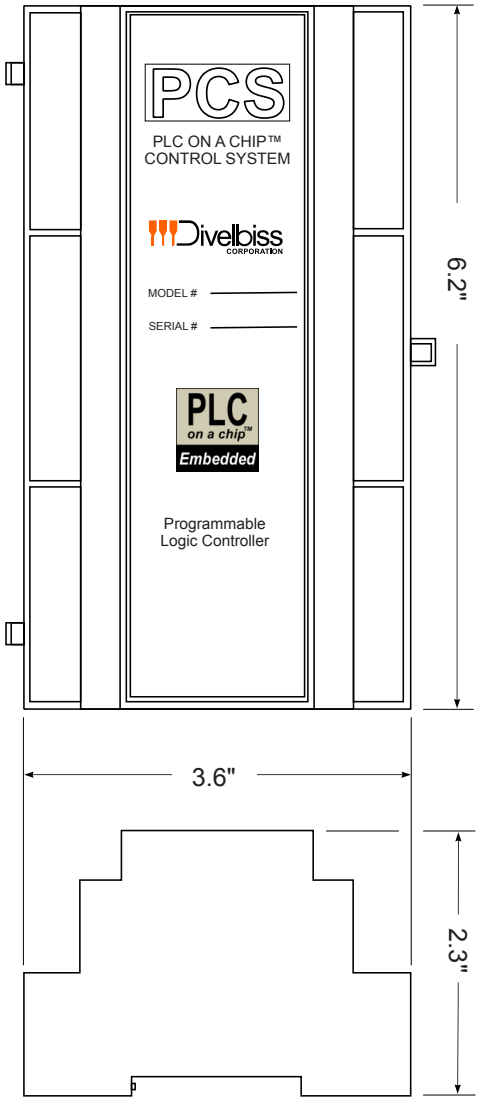
Hardware Selection Guide

Model Number Configuration: PCS - X X X (A B C)

A	**BASE SYSTEM**
1	256K PLC on a Chip Processor, High Density I/O, Interface and Real Time Clock
2	256K PLC on a Chip Processor, High Density I/O, Interface and Real Time Clock, 2 CAN Network ports, SSI port, and 2 High-speed counter inputs
B	**MULTI-PURPOSE SERIAL PORT**
0	No Serial Port installed
1	RS232 Serial Port installed
2	RS422 Serial Port installed
3	RS485 Serial Port installed
C	**ANALOG I/O**
0	No Analog I/O installed
1	6 Analog Inputs rated 0-5VDC, 4 Analog Outputs rated 0-5VDC, and 2 PWM Outputs
2	6 Analog Inputs rated 0-20maDC, 4 Analog Outputs rated 0-20maDC, and 2 PWM Outputs

Dimensions



Optional Hardware Add-ons

Description	Divelbiss Part #
Transformer 115V primary - 10V secondary	109-101153
Transformer 230V primary - 10V secondary	109-100924
High Density I/O Expander (Various Models Available)	ICM-HDIO-XXP
RS232 Null Modem Programming Cable	ICM-CA-34

Programming Software

Description	Divelbiss Part #
EZ Ladder® Development Platform	ICM-EZLDCD-01
Includes: EZ Ladder Development Platform CD	

Programming the Controller

The PLC on a Chip Control System PLCs program in Ladder Diagram using the Divelbiss EZ Ladder®, a Ladder Diagram Development Platform. EZ Ladder software parallels the IEC-61131 standard and provides an easy to use interface.

After a ladder diagram program is developed, it can be downloaded to the PCS controller via the serial port. The program is stored on non-volatile FLASH memory and is automatically executed on power up. Once the download is complete, the PCS is successfully programmed and begins executing the program.

Refer to the EZ Ladder User's Manual for more detail on creating ladder diagram programs, connecting to targets and downloading the program to targets. The manual can be downloaded from our website.

NOTE: Specifications are subject to change without notice.

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