Hardbook SoftPLC™ Processor

Cat. No. HB2-HPQA-*x*

General Description

Hardbook SoftPLC's are open architecture controller CPU's that can connect to a wide variety of I/O and communication networks. Hardbook SoftPLC's are customized at the factory to application specific configurations and include hardware assembly, driver installation, system software configuration, and system level testing.

Hardbook SoftPLC models differ only in the discrete I/O capacity (see table). Analog or special purpose module I/O channels allowed are limited only by the selected hardware, not the SoftPLC. For Allen-Bradley Remote I/O, allow for 16 discrete input points and 16 discrete output points per block transfer module.

Front View

Rear View

Features

Hardbook SoftPLC's include the rich set of functions provided by SoftPLC Control Software, including:

- Powerful Ladder Logic instruction set
- Loadable Instructions for specialized or user-written functions
- Unlimited user application memory for logic and data table
- All application documentation resides in the SoftPLC CPU
- Wide variety of I/O Drivers - ModbusTCP, Tealware™, Profibus, DeviceNet, A-B RIO, many others
- Communication Drivers - A-B Ethernet, DF1, Modbus serial, Modbus TCP/UDP, others
- Compatible with all HMI/SCADA products

- Embedded Gatecraft™ Firewall technology (optional)
- Ladder logic/data table addressing similar to Allen-Bradley PLC-5/ SLC-500 with import/conversions available
- (2) Ethernet, (4) Serial, (5) USB communication ports
- Heavy Duty Metal Enclosure with mounting brackets
- Fanless operation
- Externally accessible CFast card socket
- (2) PCI slots and (2) Mini-PCIe sockets for I/O or other interfaces
- Internal expansion slot for solid state/hard disk

Catalog Number	Discrete Inputs	Discrete Outputs
HB2-HPQA-1K	up to 1024	up to 1024
HB2-HPQA-2K	up to 2048	up to 2048
HB2-HPQA-8K	up to 8192	up to 8192

SoftPLC CORPORATION

www.softplc.com

Hardbook SoftPLC Specifications

Hardbook HB2-HPQA-*x* Specifications

System Hardware

CPU	1.91GHz Intel Atom quad core
Memory	2GB DDRAM, up to 8GB optional
Storage	4GB Industrial CFast card, expandable Externally accessible in locked socket
Expansion	(2) PCI slots, (2) Mini-PCIe sockets

I/O Interfaces

Ethernet	(2) 10/100/1000 MB ports, RJ45
Serial	(2 RS-232 ports, (2) RS-232/422/485 port, DB9 connectors
USB	(4) USB 2.0 ports, (1) USB 3.0 (900mA max)
Other	SATA 2.0 2.5" HDD, status LED's, Mic-in/Line-out, Dual Independent display *(HDMI, DVI-D)*

Power Supply

Type	3 pin terminal
Input Requirement	9 - 30 VDC
Option	24V/60W adapter for AC input power

Enclosure

Construction	Heavy Duty Aluminum, Fanless	
Mounting	Panel Mount Brackets included	
Dimensions (LxWxH)	7.7 x 7.87 x 4.37 in	195 x 200 x 111 mm
Weight (approx.)	10 lbs	4.5 kg

Environmental

Operating Temp	-20 ~ 70 ˚C	23 ~ 131˚F
Storage Temp	-30 ~ 85˚C	-4 ~ 176˚F
Humidity	10 ~ 95%, non-condensing	
Shock/Vibration	CFast: 50G, half-sine, 11ms, 2Grms @5~500Hz random, 2Grms @5~500Hz Sinusoidal	
Standards	CE/FCC/RoHS	

Recommended Options

ICO-PS6024	Din Rail Mount Power Supply, 60W, 24VDC
SPZ-WEB	SoftPLC Embedded Web Server
SPZ-FW	SoftPLC Embedded Firewall
ICO-SS*x*	Surge Suppression Equipment
TDNG-FN-*x*	TOPDOC NexGen Development/Maintenance Software

HB2-HPQA-x Mounting Diagram
(Dimensions in mm)