

Hardbook SoftPLC™ Processor

Cat. No. HB2-MMQB-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

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, Ethernet/IP, 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
- ◆ (3) Ethernet, (2) Serial, (6) USB communication ports
- ◆ Heavy Duty Metal Enclosure with mounting brackets
- ◆ Fanless operation
- ◆ Externally accessible SSD
- ◆ (2) Mini-PCIe, (1) M.2 sockets for fieldbus, WiFi or other interfaces

Catalog Number	Discrete Inputs/Outputs	Ethernet/IP Tags	ModbusTCP Servers
HB2-MMQB-LT	up to 128	16	2
HB2-MMQB-1K	up to 1024	128	16
HB2-MMQB-2K	up to 2048	512	32
HB2-MMQB-8K	up to 8192	2048	128

Hardbook SoftPLC Specifications

Hardbook HB2-MMQB-x Specifications		
System Hardware		
CPU	1.8GHz J6413 quad core Celeron	
Memory	32 GB DDR4 non ECC up to 3200 MT/s	
Storage	128GB Externally accessible SSD	
Expansion	(2) Mini-PCle sockets, (1) M.2 socket	
I/O Interfaces		
Ethernet	(3) 10/100/1000 MB ports, RJ45	
Serial	(2) RS-232/422/485 ports, DB9 connectors	
USB	(4) USB 2.0 ports, 500mA (2) USB 3.0 900mA	
Other	status LED's, Mic-in/Line-out, Dual Independent display (DP 1.4++, HDMI)	
Power Supply		
Type	3 pin terminal	
Input Requirement	24 VDC w/ +/- 20	
Option	24V/60W adapter for AC input power	
Enclosure		
Construction	Heavy Duty Aluminum, Fanless	
Mounting	Panel Mount Brackets included	
Dimensions (WxDxH)	3.34 x 6.18 x 8 in	85 x 157 x 214 mm
Environmental		
Operating Temp	-10 ~ 60 °C	14 ~ 140°F
Storage Temp	-20 ~ 80 °C	-4 ~ 176°F
Humidity	10 ~ 95%, non-condensing	
Shock/Vibration	HDD: 20G, half-sine, 11ms SSD: 50G, half-sine, 11ms, 2Grms @5~500Hz random, 2Grms @5~500Hz Sinusoidal	
Standards	CE/FCC/RoHS/UL60950/LVD	

Recommended Options	
SPZ-WEB	SoftPLC Embedded Web Server
SPZ-EML	SoftPLC Email Package
TDNG-FN-x	TOPDOC NexGen Development/ Maintenance Software

*HB2-MMQB-x Mounting Diagram
(Dimensions in mm)*

