Mini Hardbook SoftPLC™ Processor

Cat. No. HB-M0LEH-*x,* HB2-MILEH-*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.

The HB-M0LEH-*x* and HB2-MILEH-*x* are designed to be safely operated in hazardous locations, such as those with flammable gases, combustible dust, or ignitable fibers, where there is a potential for fire and explosions. They are UL listed for Class 1 Division 2 Groups A, B, C, D T3A.

SoftPLC Features

Mini 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, Modbus Serial, and many others

- Communication Drivers - A-B Ethernet, DF1, Modbus serial, ModbusTCP/UDP, others
- Compatible with all HMI/SCADA products
- Embedded Gatecraft™ Firewall technology
- Ladder logic/data table addressing similar to Allen-Bradley PLC-5/ SLC-500 with import/conversions available

Hardware Features

- (2) Ethernet, (4) Serial, (2) USB communication ports
- Compact size saves space
- Front accessible for easy wiring
- Heavy Duty Metal Enclosure with DIN or panel mounting brackets
- Fanless operation
- Internal Compact Flash
- HB2-MILEH has expansion slots for up to (2) PCI-104 cards, (1) Mini-PCI and/or internal HDD/SDD

Available Models & I/O Capacities			
Catalog Number	Discrete Inputs	Discrete Outputs	ModbusTCP Series
HB-M0LEH-LT	up to 128	up to 128	2
HB-M0LEH-1K	up to 1024	up to 1024	16
HB-M0LEH-2K	up to 2048	up to 2048	32
HB-M0LEH-8K	up to 8192	up to 8192	128

SoftPLC®
CORPORATION

Mini Hardbook SoftPLC Specifications

Hardbook HB-M0LEH-*x* Specifications

System Hardware

CPU	AMD Geode LX800 (500MHz)
Memory	256MB DDR2 SDRAM
Storage	(1) internal type I/II Compact Flash slot (option: SATA HDD/SDD for HB-MILEH)
Indicators	System: LEDs for Power, IDE, LAN and Serial
Watchdog	Programmable

I/O Interfaces

Ethernet	(2) 10/100MB ports, RJ45
Serial	(2) RS-232 ports 9 pin D-sub (2) RS-232/422/585 port, 9 pin D-sub
USB	(2) USB Rev. 1.1 compliant

Power Supply

Power Consumption	15 W (typical)
Power Requirement	9~36 VDC (24V @ 1A)

Enclosure

Construction	Heavy Duty Aluminum + SECC, Fanless w/internal cabling	
Mounting	DIN-rail or Panel Mount Brackets included	
Dimensions (LxWxH)	**HB-M0LEH** 2.8 x 6 x 5.5 in 96.5 x152x139mm	**HB2-MILEH** 3.4 x 6 x 5.5 in 85 x 152 x 139 mm
Weight (approx.)	1.6kg	2.0kg

Environmental

Operating Temp	-10 ~ 60˚C	14 ~ 140˚F
Storage Temp	-20 ~ 80˚C	-4 ~ 176˚F
Humidity	20 ~ 95%, non-condensing, operating 0 ~ 95%, non-condensing, storage	
Shock Protection	IEC 60068-2-27 CompactFlash: 50 G; HDD: 20G @wall mount, half sine, 11ms	
Vibration Protection	IEC 60068-2-24 (Random 1 Oct/min, 1 hr/axis) CompactFlash: 2 Grms @ 5~500 Hz HDD: 1Grms@5~500Hz	
Certifications	CE, FCC Class A, UL, CCC	
Hazardous Locations	US: ANSI/ISA 12.12.01-2007 cUL: CSA 22.2 No. 213 M1987, Class 1, Division 2, Groups A, B, C, D, Temperature code: T5, Ambient Temperature Range:-10˚C≤Tamb≤60˚C	

Recommended Options

ICO-PS4024	Din Rail Mount Power Supply, 40W, 24VDC
SPZ-WEB	SoftPLC Embedded Web Server
ICO-SS*x*	Surge Suppression Equipment
TDNG-FN	TOPDOC NexGen Development/Maintenance Software
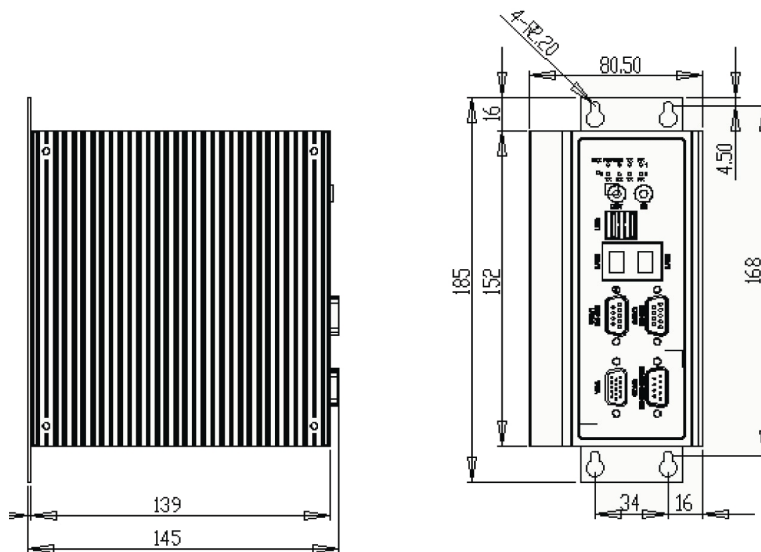
HB-M0LEH-x Mounting Diagram
(Dimensions in mm)