

MMI-1000 series

Features

- **Large LCD with Touch Panel**
- **9.4" Displays**
- **Connects to Today's Popular PLC's via Single Cable to Programming Port**
- **FREE, Windows™ based Setup Software Included**
- **24 VDC Powered**

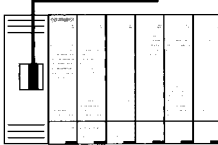
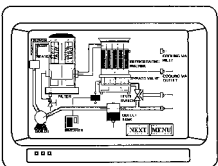
Large LCD with Touch Panel



The MMI-1000 is equipped with a high contrast, brightness, 9.4" blue mode LCD with resistive type touch panel. It's designed especially for harsh working environments. Its touch panel can economically replace hard-wired push buttons and provide increased reliability.

The operator can start, stop, toggle, or jog relays in the PLC with the touch of a designated screen area. Process parameters can also be changed easily through the built-in touch keypad.

Connect directly to most PLCs



The MMI-1000 uses each PLC's communication protocol to read or write data. It does not require the PLC to run any special program for data communication, which greatly reduces programming time. The available PLC drivers include A-B, Siemens, Omron, Mitsubishi, Modbus, Koyo and GE, etc. More and more supporting device drivers are being developed every day. The MMI-1000 uses dynamic data access approach to manage PLC data.

The system automatically compiles a variable scan list for each display page optimized for PLC communication. This improves the communication efficiency and accelerates the speed of screen refresh.

High Noise Immunity

In the field of industrial control, major noise is caused by the interruption of current to inductive loads. This causes electrical fast transient burst (EFT/B) on the order of several thousand volts. Our design team has proven experience in designing products with high noise immunity. The MMI-1000 is able to withstand EFT/B as high as 4000 V. Failure-free operation and full compliance under any noisy environment is assured.

Graphic Display Panel and Touch Screen



General Specifications

Input Power:	24 VDC \pm 5%, 250 mA
Noise Immunity:	IEC801-4, 4kV, 100kHz, 1hr.
Electrical Isolation:	AC 2kV, 1 minute, 10mA
(Input-FG)	DC 500V, 50M Ω min.
FCC:	FCC Class A
Environmental:	IP65 front panel
Operating Temp.:	32~113° F (0~45° C)
Humidity:	5-95%, non-condensing
Weight:	2.7kg

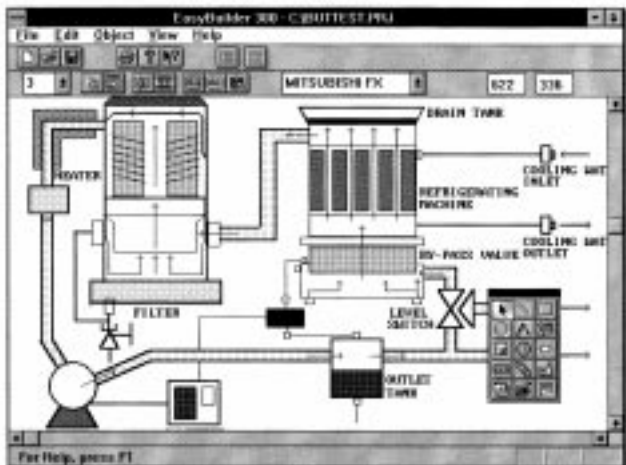
Hardware Specifications

Display:	MMI-1000: 9.4" high contrast, blue mode LCD
	MMI-1050: 9.4" blue 4 grey scale LCD
Resolution:	640(W) x 480(H) pixels
Display Area:	196(W) x 148(H) mm
Backlight:	CCFT (w/ auto shutdown)
Dot Size:	0.30(W) x 0.30(H) mm
Touch Panel:	resistive type, audible feedback on touch
Touch Resolution:	80(W) x 60(H)
Surface Hardness:	4H
Serial Port:	RS-232 x 1; RS-485 x 1 (2/4 wire setup by jumper)
Memory:	512k bytes flash ROM (640k optional) 128k bytes battery backup RAM (optional)
Parallel Port:	Standard printer port (optional)

Functional Specifications

No. of Screens:	256 max.
Text String:	1792 with total capacity 52 k bytes
Bitmap Graphics:	288 k bytes (416 k optional)
Type of Objects:	line, box, circle, bit-map graphics, text, date, time, lamp, data, push-button, screen button, file transfer, hard copy, animation, message, PLC control
No. of Objects:	5370 max.
PLC Driver:	Omron, MITSUBISHI FX, Modbus, A-B SLC, Siemens S7, GE, PLC Direct DL, Matsushita FP, and more

Easy Setup with EasyBuilder Software

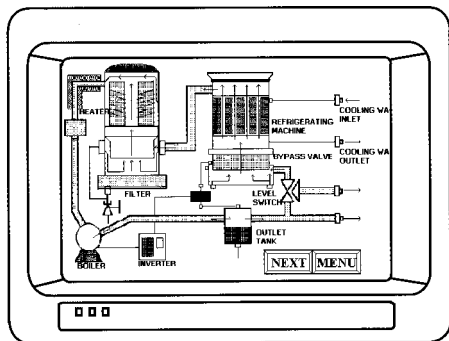
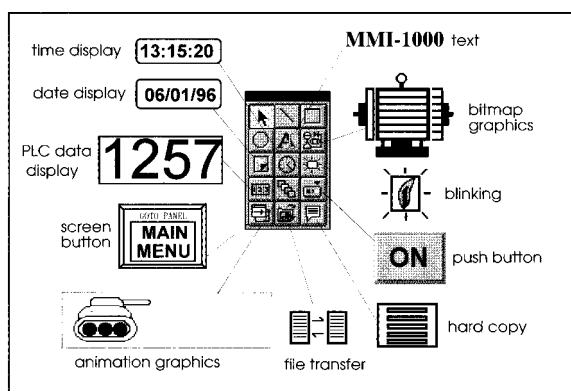


EasyBuilder is a graphics editor software program for configuring the MMI-1000. The EasyBuilder Screen Editor Software takes advantage of the Microsoft Windows graphical interface and object oriented scheme. It offers fast and intuitive configuration, simplifies application design, and reduces development costs.

Each screen is composed of a variety of elements called objects, line, circle, rectangle, text, graphics, time, date, lamp, data, animation, push button, screen button, file transport, hard copy, message and PLC control.

Configuration of the MMI-1000 is easy. To setup objects, select an icon from the toolbox, click on the right position and drag the boundary of the object, the dialog box will then appear. Then, fill in object attributes to complete the object setup process. It's a straight forward, simple, and consistent process.

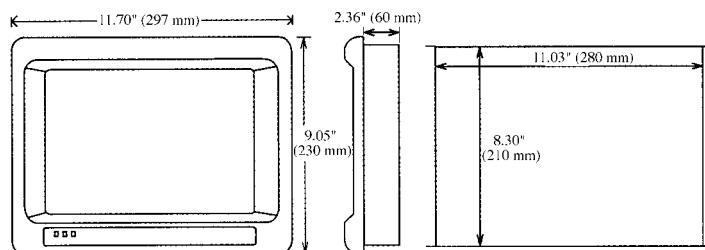
Graphics can be produced by using any familiar Windows-based graphics drawing tool such as Designer, CorelDraw, Autocad, etc. Saving the graphics to bit-mapped BMP format files. Graphics may also be cut and pasted into Paintbrush for conversion to the BMP format. You can import any graphics in BMP format into EasyBuilder to customize your application.



Other convenient features include: The ability to copy screens and objects between projects. Overlapping page to reduce duplicate objects. A custom graphics library with 300 commonly used graphics.

After completing the screen edit, connect the MMI-1000 to COM1 or COM2 port of your PC, execute load function, it will directly transfer your screen data to the MMI-1000's flash memory.

Dimensions:



Ordering Information:

Part Number	Description
MMI-1000	Graphic Interface with 9.4" high contrast, blue mode LCD and Touchscreen
MMI-1050	Graphic Interface with 9.4" blue 4 grey scale, LCD display and Touchscreen (MMI-1050 uses same Easy Builder setup software as MMI-1500)

See Page 80 for proper SMIC cable selection.