



HMI



Human Machine Interface

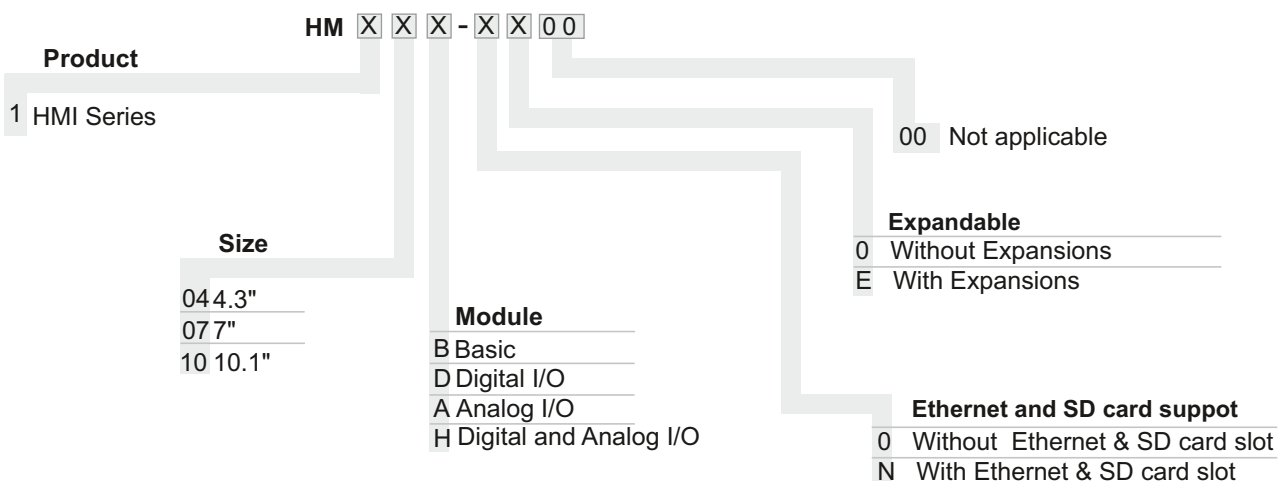


Human Machine Interface

- 4.3", 7" & 10.1" with color TFT display options with & without Ethernet
- Built-in RTC with accuracy of ± 2 Min/Month & Buzzer
- CPU - Cortex-M7, 600MHz, 1284 DMIPS
- RAM - 32 MB
- ROM - 32 MB (Without Ethernet model) & 64 MB (with Ethernet model) Expandable upto 4 GB via USB Stick/SD card
- 4 wire Resistive display with > 1,000,000 touch
- Inbuilt picture library
- Data logging function available via Internal Memory, USB Host, SD Card. Application upload/download function available via USB Slave, USB Host, SD Card, Serial & Ethernet
- Shock & Vibration protection as per IEC Standard
- Operating temperature range: 0 to 50 °C
- IP 65 protection for front panel with Class 2 Pollution Degree
- CE, RoHS Compliant



Ordering Information



NOTE: HM104B-0000 & HM104B-N000 consist of one DB9 port that supports RS232, RS422 and RS485 levels on different pins. "Y" type cable can be used for separate RS232 and RS485 levels simultaneously.

Human Machine Interface



Cat. No.	HM104B-0000	HM104B-N000
Parameters		
Supply Voltage (Φ)	24 V DC	
Nominal supply voltage range	(- 15% to + 20%) (20.4 to 28.8 VDC)	
Power Consumption (Max.)	4 W	4.5 W
Over voltage category	1 in accordance with IEC/EN 60664-1	
Backup battery	3V lithium battery	
Backup battery life	5 years or more at 25°C	
Panel Size	4.3"	
Panel type	65536 color TFT LCD	
Resolution	480 x 272 pixels	
Brightness	440 Cd/m2	
Backlight life	50000 hours	
CPU	Cortex-M7 (600MHz) 1284 DMIPS (2.14DMIPS/M Hz)	
ROM	32 MB	64 MB
RAM	32 MB	32 MB
Touch screen	4 wire resistive > 1,000,000 operated	
Buzzer	Yes	
RTC	Builtin	
Accuracy of the real-time clock	Typ. $\pm$ 2 min/month	
COM port 1	RS232/485 (Supporting Flow Control RTS-CTS)	
COM port 2	RS422/RS 485	
USB HOST	1 (2.0)	
USB client	1 (2.0)	
Ethernet	No	1-Port
SD card slot	No	Yes
Operating Temperature	0°C to +50°C	
Storage Temperature	-20°C to +70°C	
Humidity	10-95%, non-condensing	
Maximum operating Altitude	Operation: 2000 m ; Transport: 0 - 3000 m	
Pollution Degree	2	
Degree of Protection	IP 65	
Mounting	Flush with screw clamp	
Mounting position	Horizontal	
Panel cutout Dimensions (L) x (W) in mm	118.8 X 92.8	
Dimensions (L) x (W) in mm	136 X 102 X 36	
Terminal Type	Pluggable Euro type terminal	
Screw tightening Torque	0.5 N.m. (4.4 lb.in)	
Approvals	 	

Environmental Compliance

Shock	IEC 60068-2-27
Vibration	IEC 61131-2



Human Machine Interface

Cat. No.	HM107B-0000	HM107B-N000
Parameters		
Supply Voltage (Φ)	24 V DC	
Nominal supply voltage range	(- 15% to + 20%) (20.4 to 28.8 VDC)	
Power Consumption (Max.)	6 W	6.5 W
Over voltage category	1 in accordance with IEC/EN 60664-1	
Backup battery	3V lithium battery	
Backup battery life	5 years or more at 25°C	
Panel Size	7"	
Panel type	65536 color TFT LCD	
Resolution	800 x 480 pixels	
Brightness	400 Cd/m2	
Backlight life	50000 hours	
CPU	Cortex-M7 (600MHz) 1284 DMIPS (2.14DMIPS/M Hz)	
ROM	32 MB	64 MB
RAM	32 MB	32 MB
Touch screen	4 wire resistive > 1,000,000 operated	
Buzzer	Yes	
RTC	Builtin	
Accuracy of the real-time clock	Typ. $\pm$ 2 min/month	
COM port 1	RS232/485 (Supporting Flow Control RTS-CTS)	
COM port 2	RS232/RS422 /RS 485	
USB HOST	1 (2.0)	
USB client	1 (2.0)	
Ethernet	No	1-Port
SD card slot	No	Yes
Operating Temperature	0°C to +50°C	
Storage Temperature	-20°C to +70°C	
Humidity	10-95%, non-condensing	
Maximum operating Altitude	Operation: 2000 m ; Transport: 0 - 3000 m	
Pollution Degree	2	
Degree of Protection	IP 65	
Mounting	Flush with screw clamp	
Mounting position	Horizontal	
Panel cutout Dimensions (L) x (W) in mm	190 X 135	
Dimensions (L) x (W) in mm	207 X 152.3 X 36.5	
Terminal Type	Pluggable Euro type terminal	
Screw tightening Torque	0.5 N.m. (4.4 lb.in)	
Approvals	 	

Environmental Compliance

Shock	IEC 60068-2-27
Vibration	IEC 61131-2



Human Machine Interface

Cat. No.	HM110B-0000	HM110B-N000
Parameters		
Supply Voltage (Φ)	24 V DC	
Nominal supply voltage range	(- 15% to + 20%) (20.4 to 28.8 VDC)	
Power Consumption (Max.)	6.5 W	7 W
Over voltage category	1 in accordance with IEC/EN 60664-1	
Backup battery	3V lithium battery	
Backup battery life	5 years or more at 25°C	
Panel Size	10.1"	
Panel type	65536 color TFT LCD	
Resolution	1024 x 600 pixels	
Brightness	400 Cd/m2	
Backlight life	50000 hours	
CPU	Cortex-M7 (600MHz) 1284 DMIPS (2.14DMIPS/M Hz)	
ROM	32 MB	64 MB
RAM	32 MB	32 MB
Touch screen	4 wire resistive > 1,000,000 operated	
Buzzer	Yes	
RTC	Builtin	
Accuracy of the real-time clock	Typ. $\pm$ 2 min/month	
COM port 1	RS232/485 (supports HW flow control)	
COM port 2	RS232/RS422/RS485	
USB HOST	1 (2.0)	
USB client	1 (2.0)	
Ethernet	No	1-Port
SD card slot	No	Yes
Operating Temperature	0°C to +50°C	
Storage Temperature	-20°C to +70°C	
Humidity	10-95%, non-condensing	
Maximum operating Altitude	Operation: 2000 m ; Transport: 0 - 3000 m	
Pollution Degree	2	
Degree of Protection	IP 65	
Mounting	Flush with screw clamp	
Mounting position	Horizontal	
Panel cutout Dimensions (L) x (W) in mm	255 X 185	
Dimensions (L) x (W) in mm	273 X 203 X 38	
Terminal Type	Pluggable Euro type terminal	
Screw tightening Torque	0.5 N.m. (4.4 lb.in)	
Approvals	 	

Environmental Compliance

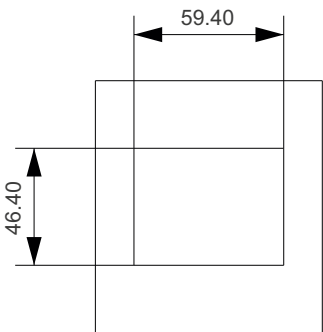
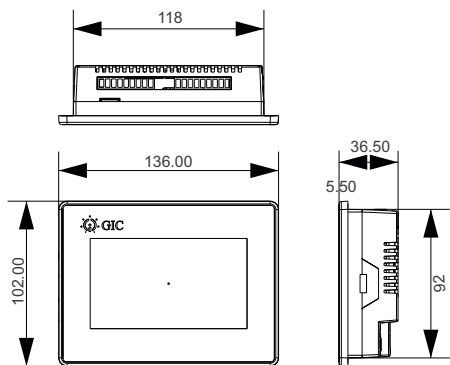
Shock	IEC 60068-2-27
Vibration	IEC 61131-2

Human Machine Interface

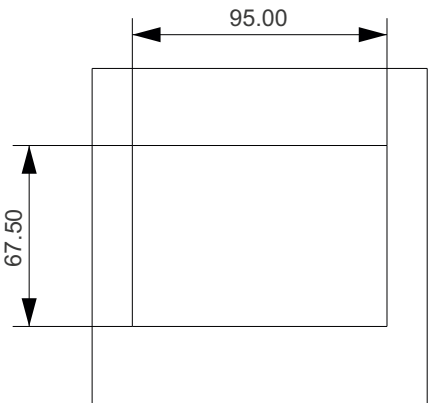
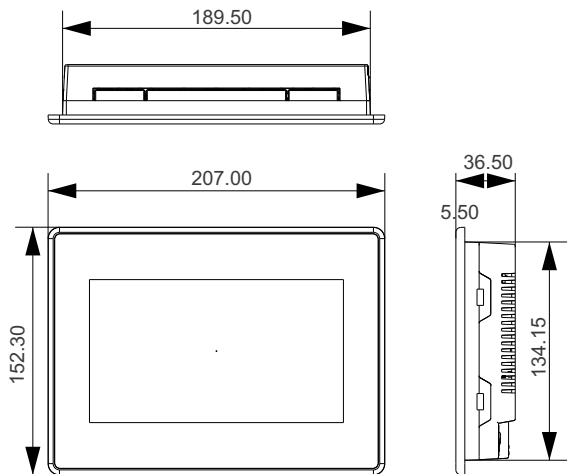


MOUNTING DIMENSIONS (mm)

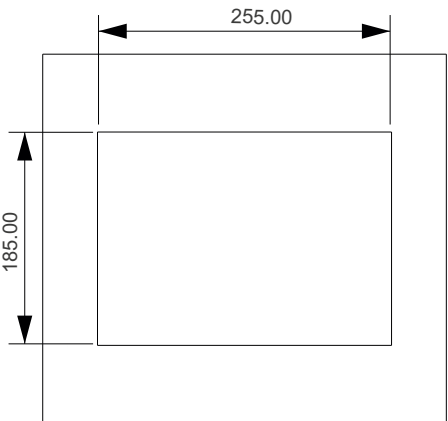
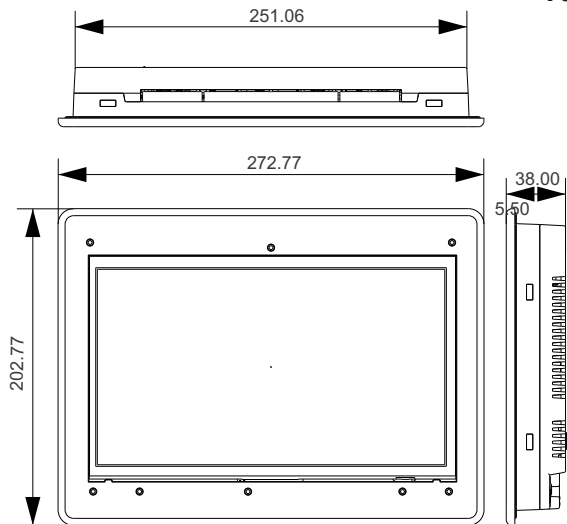
4.3 Inch



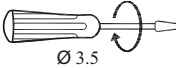
7 Inch



10.1 Inch



TERMINAL TORQUE & CAPACITY

	0.5 N.m (4.4 Lb.in)
	1 x 2.5 mm ² Solid Wire/Stranded
AWG	1 x 28 to 12